

THE ALKALOIDAL CLINIC

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A TALK WITH THE PATIENT.

Many years I have been writing to the doctor and advising him about his duties, but today it is strongly impressed upon me that *you* need a talking to much more than he does. And so we will ask the doctor to kindly step into the next room a moment while you and I have a consultation over him.

In the first place, do you notice how tired and worn he is looking? He isn't really so old—why, you and he were classmates at school, and you don't begin to look his age. Of course it's the life he has led. This getting up at all hours of the night, in all kinds of weather, the anxiety incident to his work, holding the lives of his dearest friends in the hollow of his hand, the never-ending strain—for there is always some one whose peril destroys his rest—all these things help to age a man. And then there's the worry. Doctor isn't much of a financier, and wastes lots of time attending people there isn't a red cent in; and somehow they represent the profit in his business.

Have you paid him yet? Yes, you paid him for his visits. He was pretty

hard up just then, and knocked off half for cash. Was it really a good bargain for you? Let alone the fact that you did not pay him for the time he spent, you did not count in the worry over your case, the drain on his health and shortening of his life, the pleasure he had to miss, the money spent in improving his means of doing you good work.

Do you ever calculate what it costs *you* to jew him down?

Here's the true fact as to that case: Doctor did not like the looks of your lungs after that penumonia, and he had intended to invest in a microscopic outfit, so that he could have a certainty on which to base his treatment. But you knocked out the microscope, and next time he will have to treat you for what he thinks you have, instead of what he knows ails you. Maybe it will not make any difference, and maybe he will hit the right thing, and maybe his old-fashioned drugs will do what he desires, but the office boy, who passes critical judgment on all I write, says there's too darned many maybes in that to suit him.

When you are ill you want the very best chances for certain, speedy and pleasant cure. If you want the very best service from your horse you see that he is well fed, well cared for, kept in tip-top condition; and then you have a service that pays you for your pains.

Take as much thought as to keeping your doctor in the best working condition as you do for your horse.

Doctor needs a rest. You subscribe towards sending your minister to Europe to recuperate from his arduous (???) labors of preparing a weekly sermon, which we hope does you good; but you have not sent Doctor off to recuperate his fagged brain; and yet when you are ill you surely want the very best of which he is capable. Then take some pains to keep him in good working condition. Send him to the seashore for a month.

He would come home with a bright eye, an alert look, a mind keen to see and quick to act, and you would make a mighty good profit on your investment.

He would do better work were he free from financial worry. No man with an overdue note, or a matured mortgage, or collectors dunning him, is in a fit state to practise medicine properly.

It would do him good to go to the city clinics and get onto the newest and most improved methods of treating disease. Going to meetings of medical men is good for a doctor, for he gets lots of useful hints there.

It is a good thing for you if your doctor has the latest and best apparatus, the newest and best books and journals, the very best drugs.

It would get the doctor quicker to your sick child if he had a telephone line to your house, and a faster horse or even an automobile to carry him swiftly. And if

he had had these, your baby would not have choked to death on that rubber balloon.

If Doctor had had one of those hot-air machines he would not have let you suffer a whole winter with rheumatic gout.

If you had paid him what he earned, instead of for so many visits, he could have aborted that pneumonia instead of having it run a month. It is too much to ask a man who can hardly keep out of the poorhouse, to cut his bills down to one-tenth, for a man who will give no credit but say that he "could not have been so bad as the doctor supposed, or I wouldn't have gotten up so quick."

Now, I have written this because these things come directly to my notice. Many times the doctor writes to me that he cannot afford to use the best remedies, because they cure his cases so quickly that he cannot make his living at the usual rate per visit. And so you have to lie ill for weeks, when you might be back at your business in a few days.

It is big money in your pocket to pay your doctor well, and for work done rather than for visits made.

Moreover, you can do this without its costing you a cent. If the money paid out in your town for patent medicines, quack doctors and worthless propieteries, were divided among your doctors, all the good things I have mentioned and many more could be secured for you. Money spent on quacks is lost to the community; money invested in your home doctor pays a good interest—yes, cent per cent.

I have seen both sides of this question. In over 30 years of medical practice, in correspondence with many thousands of physicians, the difficulties under which



Has anyone tried phytolaccin in goiter? Give in full doses, just short of nausea, continued for three months.

Pilocarpine in full doses greatly lessens the excretion of urine in diabetes insipidus, and aids in its cure.

they labor have been brought home to me. Times without number I have been called upon for aid, in cases the doctor could have helped as easily as I, if he had the opportunity to get at the new methods of treatment; and when I suggested a post-graduate course, he said how he realized his need and how gladly he would avail himself of the advantages, if he could only make the necessary collections. And in his county paper would be advertisements of quacks, whose cost was paid by his patients, and would have given him the advantages he required.

Pay your doctor well enough to enable him to give you the benefit of the very best that can be had on this wide earth—and then see he gives it to you. Don't let him think he can stick all his earnings away into stocks and real estate, but require of him a modern equipment. The idea that money paid to him is in trust for the benefit of his community is new to him as yet. That is not the way he has been treated up to the present. Perhaps we had better call him in and tell him the result of our consultation. And as most of the time spent at a consultation goes in telling stories, I'll just relate one here: A professor in a medical college engaged me as his family physician, and said: "I want it understood that for every service you render my family you put in your bill at double your highest rates to others. Yes, we will have it so. I am perfectly able to pay, and I want you to feel that it is always worth your while to do your best here."

We are human, everyone of us; and maybe that man got good service from us. Well, I guess yes!

DRUG QUALITY VS. DRUG PRICES.

There is a tendency all along the line of later-day commercialism, for trade to gravitate into channels where its demands are supplied the cheapest. This may be all well enough, and no doubt where the quality and workmanship of the article are perfectly evident to the tradesman, the purchaser and the consumer; but along drug lines it is very different and the doctor should not be led by price-talk to take goods of unknown or questionable value in place of those that have been found by experience to be dependable.

When a thousand doses of medicine can be purchased by a physician for from 50 cents up, what cheaper dispensing could he ask for? And what folly it is for him to jeopardize his reputation, the comfort and even the life of his patient, by experimenting with drugs offered a few cents cheaper, the value of which or the dependability of which have not been fixed.

A recent experience coming from the far-away Pacific Coast illustrates this point: A doctor had been using arsenic sulphide (which, as you know is a very sensitive salt, while at the same time it is a very important one therapeutically), in the form of the alkaloidal granules so often mentioned in the CLINIC of the size gr. 1-67—but happening to be out of the alkaloidal granules, he used some 1-20 grain tablets of a so-called "standard make" company (standard because old and moss-grown and not on the front side of the advertising pages of our medical press), the loud claim of the company being that they sell cheaper than alkaloidal granules are sold.

Many a glandular engorgement would give way to phytolaccin if given carefully and persistently, until fully tried.

Pilocarpine has proved effective in uremia and in puerperal convulsions by powerfully stimulating elimination.

He gave his patient as high as 20 of the cheaper tablets a day, getting no effect whatever. He naturally has returned to the alkaloidal granules gr. 1-67, made always from C. P. material and in a way to preserve and promptly liberate its efficiency, and 6 granules were all that were necessary to produce the desired result. Repeated comparative test but repeated the experience, and there you have it.

A little medicine rightly placed is a good thing and cheap enough, while questionable products are dear at any price. We believe in dependability all along the line. The doctor should protect himself and his patient by knowing what he is using; or in other words know what he wants to use and see that he gets it, and if his pharmacist will not supply it, then he should buy it and dispense it himself.

"A foolish consistency is the hobgoblin of little minds."—Emerson.

TRUTH IS MIGHTY AND WILL PREVAIL.

Well! Things do seem to be coming our way at last. For many, many years we have adhered stubbornly to the use of intestinal antiseptics, in spite of sneers, derision, and all sorts of efforts, active opposition and passive ignoring, to down the principle.

It was claimed that the alimentary canal could not be rendered sterile in the surgical sense. Straightway the wholly unwarranted deduction was made that intestinal antiseptics were useless. We modestly asserted that this was not a logical conclusion; that it did not accord

with the facts, abundantly proven, of the efficacy of these agents when submitted to actual clinical trial. We suggested that absolute sterilization might not be secured, but that it had yet to be proved that this was absolutely necessary for benefit to result.

Several explanations could be adduced for the benefit following the administration of these agents. They may destroy so many of the bacteria in the alimentary canal that the forces of the body can take care of the rest. They may hinder the action or the propagation of the bacteria, or their production of toxins, or the absorption of the latter, or chemically neutralize the toxins—in fact, it is preposterous to claim that no possible benefit can result unless the alimentary canal is rendered absolutely germ-free. Indeed, if we come to that, it is not possible to render the skin, or any wound, absolutely germ-free; and the same argument would destroy all the advances of modern surgery.

And we further claimed that in the consideration of this, as of all scientific questions, it was necessary to accept that explanation that harmonized all, or the greatest number, of the observed facts; and that the clinical evidences presented demanded as much consideration as the laboratory experiments.

To this the answer made was the only one possible—none whatever was attempted. The whole argument of these old fogies who persisted in trying to help their patients, and insisted that they had eyes and could see with them, as well as any German pathologist squinting into the eye-piece of his microscope, was simply ignored. Such views were not fashionable. But there are some people in this world who, though by no means dif-

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Don't hurry phytolaccin, and don't let go your hold. Washing away debris is a slow and tedious process at best.

Pilocarpine causes contractions of the uterus, gravid or otherwise, and should not be given to pregnant women.

ficult to dispose of, don't like to "holler enough" till they're licked, good and plenty; and the comfortable feeling of being so thoroughly lambasted that your conscience completely absolved you for giving up, has never come to us. And aid, most welcome aid, has come from many sources. Whenever we could induce anyone to make an actual trial of the method, we had one more supporter. Men who had accepted as gospel truth the dictum of the "authorities," were persuaded to make skeptical trial of the intestinal antiseptics, and then comes the oft-repeated story — "The sulphocarbates have been a revelation to me!"

And at last the others are beginning to catch up; and the facts deduced from clinical observations are beginning to be harmonized with the advance in other departments. Read the following from a new and valuable work just placed in the hands of the reviewer, W. G. Thompson's "Practical Dietetics," page 432:

"It is said that the bacilli fed on beef-juice produce ptomains which act more strongly upon the nervous system than if they are fed upon milk (Rachford). The starches do not make ptomains.

"The typhoid germs thrive in nitrogenous media, but not upon carbohydrates. Their development in the former is accompanied by the production of toxic material in the intestine, which, on being absorbed into the system, produces the symptomatic phenomena of the disease. This theory, which is comparatively of recent adoption, has emphasized the possible value of antiseptic treatment of the alimentary canal. While there are as yet no remedies known to therapeutics which can be used in sufficient strength in the intestine to be completely antiseptic or germicidal to the

typhoid bacilli, there is another aspect of antiseptics, or rather asepsis, of the alimentary canal, which should not be overlooked—that is, the prevention of those fermentative changes which accompany indigestion in any fever. In typhoid fever the importance of maintaining as nearly as possible the normal digestion and absorption of the food, is of special urgency on account of the length of the disease. Moreover, it would appear that the overdistention of the intestine by flatus must have a very injurious effect upon the ulcerating surfaces by stretching them. At autopsies upon typhoid patients ulcers are often seen which might have been easily torn by slight distention, and the prognosis of typhoid fever is more grave when extreme and obstinate intestinal flatulency appears early in the disease, before there has been time for either perforation or peritonitis. One can do much to prevent this condition by bestowing special care upon the whole alimentary canal."

"Some books are to be tasted, others swallowed, and some few to be chewed and digested."—Bacon.

SUBSTITUTION.

The CLINIC desires to raise the flag of warning to its 30,000 readers. Look sharp and see that what you prescribe for your patient is given your patient. Those who are interested in and working along lines of trade are aware, as few physicians are, of the great amount of substitution that is constantly being practised. Every preparation that can be counterfeited is being counterfeited by somebody. Antikamnia is substituted by all kinds of "dope." So-called

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Many excellent remedies are not utilized because so admirably adapted for chronic maladies. The doctor has no patience.

Pilocarpine stimulates excretion of urine, tears, earwax, nasal mucus, bronchial mucus, gastrointestinal juices.

but spurious, Freligh's Tonic and Arsenauero can be bought by the ounce by the unwary almost anywhere. Listerine is dispensed very much as a certain old timer used to make sarsaparilla blood purifier, acknowledging under pressure that he never had any sarsaparilla excepting the bundle that he put out at the door for advertising purposes. The Cascara products of P. D. & Company, Sharp & Dohme, Searle & Hereth, etc., are rarely dispensed except under pressure, and even Abbott's Saline Laxative, as cheap as it is, is substituted with Seidlitz powders, extemporaneous mixtures of its well-known ingredients or, what is worse yet, the soul-rending stomach-turning "Abbey's Salt." It is high time that the physician awakens to these facts and sees to it that his wants and the wants of his patients are supplied by those who are honest and will not substitute what they happen to have or what they are able to concoct for the standard specialties that he specifies.

We cannot afford to reject unexamined any idea which proposes to improve the condition of mankind, socially, morally or intellectually.

VOLCANIC ERUPTIONS.

An interesting question that arises in the medical mind, on reading the stories of the St. Pierre disaster, is as to the exact cause of death. The newspaper accounts suggest direct burning or overwhelming with the volcanic dust. This material is commonly called ashes, but it is not correctly described by that word; it is usually rocky matter finely divided by explosive action. A considerable proportion of the deaths might be due to

suffocation by noxious gases. Among such would be carbon dioxide, commonly called carbonic acid, and sulphurous acid. The former is not actively poisonous and would not be the cause of death unless present in considerable proportion, but the latter gas is highly irrespirable and even a small proportion will render air so irritating that suffocation must ensue.

We have but meager reports from those who have been near enough to great volcanic eruptions to appreciate the actual conditions. One of the most famous eruptions in history, that of Mt. Vesuvius in A. D. 79, has been described by the younger Pliny from notes left by his uncle, who lost his life in an effort to rescue a friend. The narrator states that the death of the elder Pliny was due to fumes of sulphur. Even making allowance for the imperfect identification of chemical substances at that early period, we may safely assume that by such an expression sulphurous acid was indicated, since this gas was undoubtedly familiar; indeed it is mentioned in the Odyssey as a disinfectant. The Roman writer further adds that the body was untouched by fire.

In some of the recent reports from Martinique specific mention is made of the same suffocating influences. The steamship Roddam escaped through a shower of hot fragments and lost some of her crew by the inhalation of sulphurous gases.

It may be well to note that when disaster by fire occurs in closed spaces, suffocation by carbon monoxide and smoke is likely to occur. In this way persons in the gallery of a theater may be killed without direct injury by fire or by falling timbers. It is probable that instances of

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Take chronic patients by the year, and do not visit them more frequently than once a week, or even two weeks.

Pilocarpine causes profuse sweating in strong persons and equally free salivation in weaker individuals, sick or well.

this kind have given rise to the notion of death by swallowing fire, a widespread popular belief.

Better incur the trouble of testing and exploding a thousand fallacies, than by rejecting stifle a single efficient truth.

DAUCUS PUSILLUS.

According to a writer in a recent number of the *California Medical Journal*, the *Daucus Pusillus*—small wild carrot, also called the Rattlesnake weed—which is indigenous from Texas to California, is destined to take an important place in materia medica; not only as a cure for the bite of the rattler, but also as a specific in the case of an engorged womb, taking the place of *viburnum prun.* which failed to hold the patient on in gestation, in the case quoted, a young married woman.

In this emergency it became necessary to resort to curettement, but the mother of the patient objected, stating that she could do all that was necessary in five minutes. The old lady returned with a half teacupful of what she stated was rattlesnake-weed tea, which she administered to the patient. The remedy acted almost instantaneously and the patient has been well ever since.

The weed is also stated to be a specific in angina pectoris, also in cases of cramps in the stomach and bowels. It is also alleged to be a sure cure for lumbago and painful stitches in the back, and in kidney diseases. It has also been found efficacious in cases of blood-poisoning and in chronic ulcers.

It is not poisonous. The dose of the decoction or the infusion is anywhere

from a tablespoonful to half a teacupful, and in the Sp. M. (oz. 8 of the herb to a pint of alcohol 98 per cent.) the dose is from 2 drops to 1 dram.

We have had many inquiries for this remedy, but it is not to be found in any shape in which we can use it. Can any reader inform us where a supply of the plant can be obtained?

Wear the white flower of a blameless life, before a thousand peering littlenesses.

HOW OLD PHYSICIANS CHARGED.

We are in receipt of a most interesting communication from Dr. Myron A. Shaw, of Durand, Wis., entitled, "The Country Doctor who Thrived a Century Ago." The article gives a series of extracts from the ledger of Dr. Moses Speer, of Chelsea, Vt., showing the charges made for medical attendance and drugs in the last century, which are calculated to make the modern medico open wide his eyes in amazement.

Unfortunately the demands upon our space are so great and the mass of material so large, that we have only space for a few excerpts from our contributor's valuable and extremely interesting paper, which we should like to reproduce *in extenso*. Here are a few items from the bill of one John Griswold, who flourished in the year of Our Lord, 1812:

Nov. 9. Visit daughter, rad. Sanguin. and lung powder, 42 cents; Nov. 20, Call and cough powder, 34 cents. Nov. 26, Visit, 20 cents. Dec. 8. Visit, gum opii, oil cinnamon, bottle nerve-drops, and Burgun. pitch, 42 cents, and so forth. This conscientious old physician

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Picrotoxin, pilocarpine, muscarine and arecoline. form a group of closely allied agents, all acting with great power.

Zinc phosphide probably possesses all the remedial virtues of phosphorus, but this is an inference not yet proved.

never exceeded a charge of 42 cents for visits and drugs. Perez Tracy, another of the doctor's patients, the ledger shows paid a bill of \$6.03, but he got ten visits, one emetic, one bleeding, seven blisters, and other drugs sufficient to furnish a small drug-store of these degenerate days, and paralyze the dispenser of alkaloidal remedies.

True happiness will not be found in the multitude of friends, but in *one* of genuine worth, possessed of a heart to feel and a mind to think.

CEPHAELINE.

In 1894 Paul and Cownley succeeded in separating emetine (total alkaloid from ipecac) into two components—Cephaeline, and an alkaloid for which they retained the name "Emetine." The formula $C_{15}H_{22}NO_2$ has been assigned to the cephaeline, and $C_{14}H_{20}NO_3$ to the emetine of these investigators.

R. B. Wild (*Pharm. Jour.*, 1895, p. 435) has made careful pharmacologic experiments with cephaeline. He finds that 5 milligrams (1-12 grain) produce nausea, slight dizziness, salivation, and retching but not actual vomiting; at the same time the arterial pressure is somewhat diminished. A dose of 10 milligrams (1-6 grain) produces similar effects, followed in an hour by violent vomiting; occasionally intestinal peristalsis is increased, a soft stool resulting. No appreciable influence on the nasal mucosa, skin or urinary system has been observed, and the vomited matter does not contain an excess of bile. Furthermore, cephaeline is reported to have but a moderately toxic action on the voluntary muscles; the walls of the blood-vessels are not excessively contracted,

and the nervous supply of the heart is also not affected in an unusual degree."

The cost of cephaeline precludes its employment as emetin in large doses appears to cover its uses. Granules of gr. 1-134 each would cost about 1 cent apiece.

The Christian works from the center, the moralist from the circumference.

SLEEP.

Fatigue is a sort of intoxication which necessarily involves an arrest of function. Organized beings are for the most part subjected to a periodical repose, characterized especially among men by an abolition, more or less complete, of the functions of the nervous centers and by a certain relaxation of organic life.

The need of sleep is one of the most imperative physiologic needs, and each one knows how difficult and painful it is to resist it. Two points regarding this should be noted: First, that sleep always comes on at the end of a certain time of day or of vital activity; and in the second place, that it is more irresistible and profound as the vital activity has been extreme and prolonged. Observation thus leads us to regard sleep as a consequence of the activity of our various organs. The mechanism of these relations, however, has long been and still is obscure. It is only to-day that, thanks to those who know, we have learned that it is, first, fatigue which produces the necessity for the periodicity of sleep; and secondly, the plasticity of the elements of the nervous system which explains the causes and intimate nature of sleep and the different psychic phenomena—loss of consciousness, dreams, and the like—which attend it.

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Zinc phosphide influences the nutrition of the nerve centers favorably more powerfully than any other remedy.

If picrotoxin does a fourth of the things claimed for it, it is too valuable to be neglected. Try it and tell us.

A well-known man in England had among his ancestors a number of men and women who committed suicide. He himself became despondent and melancholy, and his children, who knew the hereditary taint, were much worried about him. A physician told him that mental fatigue was his trouble and persuaded him to try an experiment. The man was a very busy man and scoffed at the idea of taking a nap in the middle of the day. He finally agreed to the following: He would sit in his easy chair every afternoon with his hands over his knees, holding a dinner bell in both hands. If he lost consciousness and went to sleep, he would be willing to sleep for so long a time as it would take for the dinner bell to fall to the floor and wake him up.

The doctor who suggested this arrangement declared that the mere mental relaxation of going to sleep if only for a few seconds, would suffice to save him. He invited his patient to study the activity of the brain by noticing how many things he could dream while the dinner bell was falling to the floor.

Every day for several months the man with the suicidal heredity sat down after luncheon with the dinner bell in his hands. Every day he went to sleep, slept for half a second, while the bell fell to the floor and his mental condition improved steadily, partly because of the rest which his mind got by losing consciousness for a second, and partly because of his interest in the extraordinary dreams which passed through his brain while the bell was falling. These dreams carried him all over the world and seemed to last indefinitely. A dozen or more human beings were mixed up in them. A long succession

of events, which were perfectly clear, passed before his eyes, gradually interrupted by a sound from a distance which at first would mix in with the dream and ultimately would prove to be the dinner bell striking the floor. The ordinary person who says that he has been dreaming all night probably does not realize that he actually dreamed about a second and a half while he was waking up.

If you study the duration of your dreams you will realize the marvelous structure of the brain and the unlimited possibilities of its development. We have no conception of the speed at which it works, no idea how feebly our most violent efforts at writing or speaking or otherwise formulating thought reflect the possibilities of thought itself.

If through act of mine, thankfulness, relief or peace can come to any face, let me seek no other joy.

TRAINED NURSES.

Intelligent and practical efforts to raise the standard of trained nurses, and to put nursing on a professional basis where special aptitude, skill and training will receive their adequate measure of recognition, merit the hearty support of state legislatures and of the public generally.

The trained nurse is recognized as an indispensable adjunct to medical practice in a large class of dangerous and critical ailments. To be a trained nurse nowadays implies more responsibility, more serious duties, a higher skill and a more thorough training than is required in any other vocation open to women save the practice of medicine itself. In such diseases as typhoid fever, pneu-

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Zinc phosphide is the best single remedy for general debility of the type of nerve exhaustion or neurasthenia.

Catarrhal jaundice, chronic diarrhea and dysentery, are benefited by picROTOXIN. Dose gr. 1-134 three times a day.

monia and other forms of infectious diseases, nursing is "half the battle."

The knowledge of hygiene, ventilation, dietetics, anatomy, materia medica and antiseptics now required compels the nurse to devote two or three years of her life to special preparation. The graduate nurse of today occupies a position of ever-increasing importance. That she shall attain to the highest standard of skill and efficiency it is necessary that her work should be provided with some of the safeguards that are thrown around other skilled professions.

An important movement in this direction is the agitation in favor of state registration of nurses. Under such a system graduate nurses would be differentiated from "uncertified" or untrained nurses, and the professional status of the trained nurse would be no less sharply defined than that of the physician.

"Reasonableness" would save from many a blunder, correct many an extravagance, strip away the tinsel from many a fair pretension, and readjust our estimate of the value of character and service.

WEIGHING DREAM THOUGHTS.

An instrument which will weigh thoughts and dreams, or which will measure the exact amount of sleep an individual is enjoying, is a unique product of the instrument-maker's art now being sold to various gymnasiums, psychological laboratories and other institutions.

Blood, after all, is the food for thought. Sleep is now known to occur only when the brain is drained of blood. By some experimenters dreams are believed to be caused by small quantities of blood left in the vessels of the cere-

brum—quantities insufficient to impair sleep entirely. The skulls of dogs have been trephined, and the buttons of bones removed and replaced by watch crystals. A specialist in brain-diseases had as a patient a girl who had accidentally lost a portion of the front of her skull, exposing the brain. Through the crystals in the dogs' skulls and the opening in that of the unfortunate girl, the behavior of the brain during sleep was studied. It was discovered that as sleep comes on the brain gradually turns pale. Upon sudden awakening the blood as suddenly returns to it. Dreams cause it to grow pink, with a depth of color proportionate to their intensity.

This machine which weighs thoughts and dreams might be best described to the popular mind as a shallow coffin, exactly balanced on knife blades, so as to rock gently like a perfectly-poised seesaw. The subject is placed within the shallow tray, and after his body has come to rest weights are shifted, until an even balance is maintained with provisions for his added weight. Graduated scales, spirit levels and indicators, betray the slightest disturbance of his equilibrium. But even the movement of the diaphragm due to breathing causes a continuous rocking of the board. A pointer, scraping against smoked paper pasted upon a revolving cylinder, shows at a glance the variation of the rocking within a known space of time. No weighing scales are more delicate. This is how thoughts are weighed:

I lay down on the rocking board and after much turning of bolts, levers and the like, a reasonable balance was found. At each inhalation my head would rise, and *vice versa*. "Let your mind be passive. Think of nothing in particular," the experimenter commanded. I obeyed.

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Zinc phosphide is an excellent remedy for the intervals between neuralgic paroxysms, in the nervously exhausted.

Picrotoxin is on the list of remedies for tetanus, hydrophobia, and many other grave maladies of the nervous system.

More screws were turned until the balance became perfect.

"Now multiply 516 by 7," was the second command. I obeyed again, and as I made the multiplication, mentally, I observed that my head was gradually falling. "Take deep breaths and try and go to sleep," was the third command.

Again I did as I was told. The deep breaths set the machine to rocking like a cradle. Gradually I grew drowsier and drowsier and—the curve on the smoked paper told the tale.

Oscillations, the spontaneous changes of the locality of the blood, arising from dream thoughts and psychic conditions acting on the vasomotor nerves, were all traced with wonderful accuracy, showing the possibility of weighing dream thoughts. The instrument will be of great scientific value to the psychologist.

If you would increase your happiness and prolong your life, forget your neighbors' faults.

THE MEDICAL STANDARD.

It is a very noticeable fact that the number of men in the graduating classes of various medical colleges is each year decreasing. The reason, undoubtedly, is the effort being made by the present members of the medical profession to raise the standard of requirements. Complaint has rightly been made, in years gone by, that there were men with the degree of doctor of medicine who had not received proper preliminary education and were lacking in culture.

In New York and some few other states, the attention of the State Medical Society has been directed towards having laws enacted, putting up the bars

around the medical profession, until now it is impossible to enter a medical college without first procuring from the State Universities a medical student's certificate, equal to 48 academic counts, besides the certificate given for passing the preliminary or grammar school subjects. It is estimated that the medical student's certificate is equal to a course in a high school, incorporated under the regents.

It is said now to be the intention of the medical profession to raise the standard still higher, and before long none but a graduate of a college will be permitted to enter on the study of medicine. When it is considered that the responsibility of a physician is greater, comparatively, than that of a member of any other profession, because on his skill and art depend the lives of innumerable persons, this desire of learned medical men, who are aware of the mistakes of their colleagues, must meet with the approval of every intelligent citizen.

It is natural to suppose that while at times a young man who has not had the advantage of a college education may make a capable physician or surgeon, a university course would materially assist students of medicine, for their minds have been thus trained and they are better equipped for the pursuit of knowledge in the art of medicine and the science of surgery.

A decrease of over one-half in the number of some graduating classes is noted, as compared with that of previous years, but the efficiency of the several members was never so high.

A student who receives the degree of M. D. today is better equipped, and has had more practical, clinic and hospital experience than ever before.

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In insomnia from nervous exhaustion, give zinc phosphide gr. 1-6 before each meal and at bedtime, and a hot bath.

Picrotoxin has been recommended in exophthalmic goiter, and this is very probable. Dose gr. 1-134 four times a day.

LEADING ARTICLES

ATROPINE.

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OF all the remarkable agents in this wonderful alkalometric armamentarium, none is of greater interest than atropine. The more the science of drug-action is studied the greater is the tendency to lift this powerful alkaloid into the place heretofore occupied by morphine, a monarch who has forfeited his crown by bad behavior.

The group of plants containing atropine has been from the earliest days of the medical art recognized as possessed of powerful influences, for good or evil, over the human body. As poisons the names of deadly night-shade, henbane and death-apple represent the popular idea of belladonna, hyoscyamus and stramonium respectively.

In medical practice they were recommended for about everything in the list, especially for maladies not readily controlled by ordinary agents; but the general repute of the whole group was—unquestioned power but uncertainty of action, and therefore unreliability. They were remedies “to be tried,” and that this uncertainty should exist in the case of these ancient remedies, after thous-

ands of years’ use, shows well the true status of the science of therapeutics in this, the twentieth century of Christianity; though in truth the use of these drugs antedated the present era by at least twenty centuries more.

We now know that the cause of this uncertainty lay in the varying chemical composition of the plants. Nature is unvarying and in her is no shadow of uncertainty; and the same conditions of sunshine, heat and moisture accomplish the same results, with of course the other influences of soil, competition, etc. And as these conditions vary she produces varying proportions of atropine in each of these plants, and varying proportions of certain other alkaloids as well. She leaves to the enlightened reason of man the task of separating these principles and utilizing their properties.

And now we must ask the reader to bear with us a little. We know that the following details are dry. Should you require a hypnotic, read them; if the information smacks of the textbook and contains details long since mastered, skip it; and pass on to the part that really imports you to know—the ap-

plications to treatment of disease. But some time in the long distant future the art of therapeutics is going to be based on the known influence of remedies over the vital processes; and it is our duty to prepare for that day to the best of our abilities.

Belladonna contains atropine with hyoscyne, hyoscyamine, atropamine, and belladonnine. Atropine predominates.

Hyoscyamus contains hyoscyamine and hyoscyne, with a little atropine. Either may predominate.

Stramonium contains atropine, hyoscyamine and hyoscyne.

Duboisia myropoides contains hyoscyne or hyoscyamine and other alkaloids. Another duboisia contains piturine, closely allied to nicotine.

Scopolia contains hyoscyamine, hyoscyne and a little atropine.

Mandragora probably contains a mixture of these alkaloids.

The leaves of tobacco and potato contain some of these alkaloids. Decomposing fish and meat contain a ptomaine, ptomatropine, whose effects closely resemble those of atropine.

Not one of these sources supplies any one of these alkaloids without the other, or in unvarying proportions. Belladonna comes nearest to giving a uniform effect, the atropine nearly always predominating.

These agents affect man and the dog easily, while other animals feed upon the plants containing them with impunity.

Atropine was isolated in 1833 by Geiger and Hesse, but Mein had already discovered it in 1831. It crystallizes in prismatic needles. Formula $C_{17}H_{23}NO_3$. It is soluble in 300 parts of cold water or in 58 parts boiling water, very soluble in alcohol, and this solution is

very easily precipitated by a very little water. It is soluble in 35 parts cold ether, 6 of boiling ether, 3 parts chloroform and very easily in amylic alcohol. The salts crystallize with difficulty, and are readily soluble in water or alcohol, very slightly in ether.

Van Renterghem gives the following as the symptoms ensuing as they appear successively after taking atropine: Dryness of mouth and throat, thirst, disordered vision, paralysis of accommodation, alteration of the voice, aphonia, sense of cold followed by rapid pulse, redness of the face, vertigo, headache, and delirium. If the alkaloid be then discontinued, the symptoms subside in reverse order in 12 hours, except the ocular, which may last longer. Very large doses cause the same symptoms but more accentuated, the stage of excitement short and quickly followed by that of paralysis; deglutition impossible, dysphagia, rabic symptoms, injected conjunctivæ, eyes prominent, face crimson, iris disappeared, furious delirium, ending in complete adynamia, fall of pulse, which had reached 150, lessened heat, respiration difficult, cutaneous anesthesia, paresis, soporous state, convulsions general and partial, retention and then incontinence of urine and feces, weakening and irregularity of the pulse, and death by asphyxia in 3 to 36 hours.

The muscular motor nerve-ends are paralyzed by large doses; as well as the cutaneous sensory nerve-ends, hypodermic injections producing more local anesthesia than morphine. Gubler mentions a case where the patient after a full dose was unable to button his clothes, the tactile sense being abolished and the muscles having lost their power.

While small doses paralyze the intracardiac vagus ends, permitting an enor-

The time for giving zinc phosphide to paralytics is when all irritation has ceased, some weeks after the stroke.

Picrotoxin is said to be useful in bulbar or glosso-laryngeal paralysis, but this seems doubtful to the writer.

mous rise of the pulse-rate, it is evident that other portions of the heart are influenced by atropine, since it lifts the paralysis caused by chloroform, potash salts, oxalates, cholates, apomorphine, copper, zinc, antimony or quinine (Luchsinger).

Atropine stops the action of glands by a direct influence over the secretory nerve fibers, the vasomotor influence going for nothing.

It arrests the peristaltic movements of the intestine completely when they depend only on the motor nerve-centers (Schmiedeberg). The paralyzant action is best shown when the circular fibers are in spasmodic contraction. This action is exerted on the stomach, spleen, bladder, uterus, bronchi, etc.

Small doses lessen the excitability of the ganglionic system of the intestine, bladder, ureters, uterus, perhaps paralyzing the smooth muscular fibers themselves (Bezold and Bloebaum).

The scarlatiniform redness of the face and upper part of the body may depend on the local vasodilation, or rather on the rapid pulse and rise of blood-pressure (Van Renterghem).

The influence of atropine on the vasomotor nerves explains its antiphlogistic effect. Zeller observed that a solution of atropine sulphate in a neutral solution of sodium chloride dilated the arteries, accelerating the circulation in veins and capillaries not dilated. The passage of white globules into the tissues was checked, the amœboid movement of emigrated cells was lost on contact with atropine, and they became round and opaque.

Atropine exerts its effects markedly on the peripheral nerve-ends, paralyzing the pupil contractors and accommodation apparatus of the eye, the cardiac inhib-

itory centers connected with the vagus, the intestinal and other unstriated muscular fiber, and the secretory nerves of many glands. Large doses affect the cerebrum causing delirium.

The conjunctiva is most sensitive to atropine, which diffuses itself into the ocular tissues without entering the blood, as one pupil, or even a part of one pupil, may be fully dilated without affecting the other pupil or the rest of that one. The drug affects the ends of the oculo-motor fibers in the muscle-cells of the sphincter. If thoroughly atropinized no direct irritation of the oculo-motor in the cranium will affect the pupil; though if the patient be insulated and a static current applied to any part of the body the iris will contract (Neiswanger). In birds the iris consists of striated muscle fiber, and this is not affected by atropine. To paralyze the accommodation requires larger doses and longer time.

Atropine lessens the number of the leucocytes, and the excretion of uric acid (Horbaczewski).

When atropine is given internally, in doses of 0.001 (gr. 1-67) thrice daily, it affects the eye, the glandular innervation and the motion of organs containing unstriated muscle-fiber, including the heart. In moderate doses atropine abolishes the action of the chorda tympani on the salivary secretion, but not the influence of this nerve over the dilation of blood-vessels, nor the function of the gland-cells. For irritation of the sympathetic has the same effect after the atropine intoxication as before it, the gland-cells secreting thick and scanty saliva (Heidenhain). Physostigmine in large doses, injected into the artery of the gland or its parenchyma, overcomes this paralysis, unless the dose of atropine



Picrotoxin has proved of benefit in chorea, local chorea especially, and in ataxia, chronic myelitis, and senile tremor.

Picrotoxin has been recommended in several forms of paralysis, spinal and laryngeal. Dose gr. 1-1.34 three times a day.

is overwhelming, and active in the general circulation. All the salivary glands are affected alike by atropine. Minute doses stop the secretion of the mucous glands of the tongue, controlled by the glosso-pharyngeal. The lessened sense of smell is due to the drying up of the nasal mucus-secretion.

On the glands of the digestive apparatus atropine acts less energetically. The secretion of pepsin and hydrochloric acid is checked. The pancreatic secretion is checked, and simultaneously the passage of substances from the stomach into the duodenum completely prevented (Pawlow). Irritation of the vagus excites pancreatic secretion, limited but not entirely stopped by atropine (Pawlow). The increase of pancreatic secretion by muscarine is completely suppressed by atropine, but the stimulation of bile-secretion by muscarine is only lessened by atropine. This would indicate the value of atropine as a remedy for hyperchlorhydria.

The amount of urine and of urea is lessened by intravenous doses of atropine, 0.0015—0.002 (gr. 1-43—1-33) per kilo of body-weight. This decrease is prevented by free ingestion of water, salt and urea.

On the perspiration the effect of atropine is strictly analogous to that on the sweat-glands. Reflex and direct irritation of the secretory nerves are alike useless, even after small doses of atropine (Luchsinger). Pilocarpine or physostigmine applied locally restores the secretion and the irritability of the centrifugal secretory nerves.

It is less certain that atropine directly lessens the secretion of milk and of the respiratory mucosa. The action of this agent on the blood-vessels may account for the clinical observations made in this

respect, which certainly show a decrease in the secretion.

The nerve-ends in unstriated muscle-fiber are paralyzed by atropine, as those of striated fiber are by carmine. When under the toxic influence of atropine, irritation of the vagus will not produce gastric or intestinal motion. Small doses of atropine stop peristalsis, while large doses directly irritate the intestinal musculature, and even with small doses the previously quiet intestine will begin peristalsis (Liebreich). But exceedingly small doses by paralyzing inhibition facilitate the movement of the bowels (Brünton).

The paralytant dose of atropine varies with different organs. The bladder retains irritability when the œsophagus is paralyzed.

Atropine acts on the circular muscle-fibers of the arteries locally and from the vasomotor centers. Added to the blood supplied an excised living organ, the current is slowed briefly and then much accelerated, showing the relaxation of the circular arterial muscles. By exciting the vasomotor center the vascular tension is raised. In dogs, after large doses, 0.0r per kilo, the cutaneous vessels dilated while the cerebral vessels contracted, and the arterial tension was raised (Albertini). This central effect is transmitted mainly by the cervical sympathetic, and when this is severed neither dilation nor contraction occurs.

On the heart even small doses paralyze inhibition, the pulse-rate in man increasing. No amount of irritation of the vagus will slow the pulse or stop the heart under atropine. So also dyspnea and irritability lose their effect on the heart. For some unknown reason the heart first slows when a toxic dose—0.005 (gr. 1-12)—of atropine is taken.

In locomotor ataxia, the powerful nutritive influence of zinc phosphide may well be utilized. Gr. 1-6 thrice a day.

Picrotoxin has been recommended in chronic alcoholism, and alcoholic epilepsy, especially in anemic patients.

Yet the slow pulse of muscarine, which stops the heart in diastole, is promptly quickened by atropine; while muscarine is unable, in any dose, to antidote the effects of atropine. Large doses of the latter directly paralyze the muscular fibers of the heart.

On the respiration atropine acts by paralyzing the vagus ends, and slows the breathing. But by its action on the respiratory center it prolongs and deepens the respirations.

On the brain atropine acts as an irritant, in large doses causing excitement, unrest, insomnia, haste in movements and combativeness. In full intoxicant doses it causes hallucinations of sight and hearing, delirium mostly cheerful, erotism, impulse to constant activity, eventuating in convulsions; followed by parietic symptoms, syncope, anesthesia, sopor. Very large doses finally paralyze striated muscle, like curarine.

Some tolerance of atropine may be acquired, but cumulative effects may occur ending in death.

Atropine often causes a rise in temperature, independent of the convulsions and circulatory changes. The heat radiation is increased but the heat-formation still more. This is due to a direct action on the cerebral heat-center (Ott).

SYNERGISTS.

The mydriatic group, belladonnine, homatropine, duboisine, daturine, hyoscyamine, mandragorine, all probably forms or compounds of atropine. Among auxiliaries are hydrocyanic acid, a mydriatic, analgesic and cough sedative; quinine as an antiphlogistic; cicutine as a paralyzant of motor nerve-ends, analgesic and mydriatic; morphine, although it contracts the pupil and congests the brain, suspends bronchial and intestinal

secretion and calms pain; strychnine raises the general tonicity and augments the debilitated contractility of the longitudinal muscular fibers in cases of mixed paresis and spasm, often present in asthma, dysuria, retention of feces; camphor monobromide as antispasmodic and sexual sedative, in the latter adding gelsemin and cypripedin; quinine and ergotin in combating hyperemia and as oxytocics; camphor, capsicum and glonoin in forcing out retarded eruptions.

ANTAGONISTS.

Nicotine is held by some to be synergist, but seems rather an antagonist, as it contracts the pupil, and augments all the secretions, especially the sweat and saliva.

Muscarine excites the parts of the peripheral organs paralyzed by atropine, slows pulse, lowers arterial pressure, increases saliva, tears, sweat, mucous secretions, bile, pancreatic juice, causes contraction of the pupil and spasm of accommodation, tetanic contraction of stomach and intestines, of bladder, spleen and uterus.

Pilocarpine and nicotine possess properties analogous to those of muscarine. The excitation of the peripheral terminations of the inhibitory nerve of the heart produced by these alkaloids is soon followed by paralysis, as the primitive myosis is succeeded by a light mydriasis. Both augment glandular secretion and excite contractions of the stomach and intestines. Atropine prevents or sedates these symptoms.

By its special action on the secretion of the bronchial mucous glands apomorphine is the antipode of atropine. But nevertheless we can serve ourselves with both at once, the apomorphine to diminish

In leucocythemia, after clearing and asepticizing the alimentary canal, give zinc phosphide gr. 1-6 four times a day.

Picrotoxin is one of the five drugs that elevate the temperature. What are the other four, you smart recent graduates?

ish the viscosity of the bronchial mucus, the atropine to relax spasm.

Physostigmine, which excites the muscular system of the life of relation as well as that of nutrition, and tends to paralyze the whole central nervous system, is but illusory as an antagonist. Experimenting on a cat, by giving successively muscarine, atropine and physostigmine, we can cause spasm of the intestine, then complete detention, and again spasm; myosis and accommodation spasm, then pupil-dilatation and accommodation-paralysis, finally again pupillary contraction; the salivation caused by muscarine is arrested by atropine and restored by physostigmine. Probably physostigmine excites the muscular fiber and gland tissue thereby masking or neutralizing the paralysis of the peripheric nerve-ends produced by atropine.

Gelsemin, cicutine and the bromides combat the cerebral hyperemia of atropine.

An exact antagonism of medicinal agents is unknown. One modifies the apparent effect of another by acting on some other part of the bodily mechanism.

Atropine is an effective remedy in poisoning from the fly fungus, *amanita muscaria*, or its alkaloid muscarine (Schmiedeberg). In nicotine poisoning the stage of irritation is combated by atropine, but the sudden reversion to paralysis nearly related to that of atropine, suggests caution (Kobert). More important is its antagonism to morphine. The lowering of vascular tension and slowing of respiration caused by morphine are directly antagonized by atropine. Failure may be ascribed to overdosing with atropine, its paralytic effects becoming manifest. But morphine

is far from being a counter-poison to atropine.

Children bear atropine much better than adults. Flaxen blonds are extraordinarily liable to its action, even in the smallest doses. Inebriates are apt to become wildly delirious from ordinary medicinal doses, of 0.0005 (gr. 1-134). Idiosyncrasies are common. This remedy should therefore be given in very small doses, repeated quickly till the desired effect is manifest.

THERAPEUTICS.

As a mydriatic atropine has become indispensable to the oculist, from the uniformity, certainty and power of its effects. A solution of 0.06 (gr. j) to 8.0 (two drams) of distilled water is usually prescribed, five drops being applied to the lower conjunctival fold every four hours for two days. This fully dilates the pupil and paralyzes the accommodation.

Homatropine may be preferable as a pupil dilator but cannot replace atropine in the treatment of ocular maladies. A single application, may determine the access of glaucoma, hence the intra-ocular tension should always be tested before applying atropine. In superficial inflammations of the cornea with photophobia, especially if complicated with maladies of the iris, atropine acts by arresting the amoeboid movement and migration of the white cells, and by preventing, by arterial dilatation and acceleration of the blood-current in the inflamed part, the adhesion of wandering cells to the lining of the capillaries and veins (Binz).

Deep corneal ulcerations threatening perforation, and conditions with increased intraocular pressure, contraindicate the use of atropine. Affections of the iris, however, form the special field



Don't give morphine to relieve the pain when you have strapped a testicle and swelling occurs under the straps.

Pilocarpine removes urea and other waste products as well as water in uremia and renal inadequacy as to solids.

for atropine, its instillation being prophylactic. Adhesions due to inflammation can often be prevented; synechiæ rupture by atropine, alone or alternated with physostigmine. Van Renterghem speaks of the improved results secured from the use of atropine when conjoined with the internal use of aconitine, veratrine and digitalin for fever and inflammation, quinine for the access, morphine and croton-chloral for pain, and antidiathetics like mercury iodides, etc., as indicated.

In headache due to eye-strain the local application of atropine to the conjunctiva often affords great relief. In immature cataract and spasm of accommodation, instillations of atropine solution are used with benefit. There is little danger of systemic poisoning from this local use of atropine, except in idiosyncrasies. If the solution is allowed to become alive with micro-organisms and is used long, granulation of the eyelids may arise. This is prevented by employing solutions certainly sterile. Some persons are so susceptible to atropine that the skin flushes at the least contact with it. Sometimes the mydriasis persists for months instead of subsiding within a week.

The internal uses of atropine spring primarily from its power of paralyzing the peripheral nerve-ends. The difficulty of sharply differentiating the toxic from the medicinal dose, and the contradictory results, are the reasons this mighty medicament has not attained the notable place it probably deserves (Liebreich).

In painful affections of the skin, mucous membranes and muscles, atropine has been administered with success.

As a muscular relaxant atropine finds employment in spasmodic conditions,

sphincter constrictions, spasm of smooth muscular fiber, especially circular, in œsophagismus, cardialgia, colics intestinal, hepatic, renal, uterine, spasm of the neck of the bladder, of the uterus, of the vaginal and urethral orifices, of the anal sphincter.

In all pathologic contractions or excessive activity of non-striated muscle-fiber, in the tenesmus of dysentery, nocturnal enuresis, the use of atropine is well established; especially in lead-colic, whose phenomena may be completely dissipated by atropine (Harnack). By relieving spasmodic contraction of the muscular coat of the bowel, it relieves obstruction. Hence, in strangulated hernia it has been given with most satisfactory results. Oppenheider gave it in nine cases of obstinate painful constipation from hepatic cancer, peritonitis, etc., and obtained relief from full "toxic" doses. Norman Kerr reported five similar cases, three having fecal vomiting, all successful. It is indicated in all cases of high grade, persistent constipation, where enemata and saline cathartics fail and drastics cause pain; also where opiates and chloral have been used to relieve pain (Oppenheider). In this category come many cases usually ranked as appendicitis of the catarrhal form, and obstructions following the ingestion of indigestible food, such as berries, in very large quantities. Too many of these are subjected to the knife, too many die after the action of violent cathartics; but such cases yield readily when brought under the influence of atropine, with hot colonic flushing and saline laxatives.

Rarely do these states depend on one morbid factor alone; so that with atropine we associate strychnine or brucine as general incitants, morphine and cicu-



Pilocarpine eliminates lead, mercury, arsenic, and the toxic products of all the cachexias, including syphilis.

The pain of imprisoned pus cannot be relieved by any drug, and only subsides when the pus is evacuated.

tine to subdue nervous hyperesthesia, and among other agents in combating various phenomena.

In the convulsive stage of whooping-cough, in spasmodic asthma, and all irritative coughs, atropine prevents the spasm. It finds application as an antispasmodic in dysmenorrhea, uncontrollable vomiting, volvulus, invagination and strangulated hernia.

In all these atropine requires the aid of modifiers: Calcium sulphide, apomorphine, and quinine hydroferrocyanate in whooping-cough; strychnine and arsenic in asthma; ergotin, iron, quinine, strychnine, in dysmenorrhea; brucine, strychnine, morphine for vomiting; strychnine for intestinal strangulation.

Atropine serves well for constipation or for diarrhea. By relaxing intestinal spasm it reestablishes the regularity of the evacuations; by arresting exaggerated peristalsis and glandular secretion it arrests intestinal fluxes.

The property of moderating secretion has been utilized in the night-sweats of phthisis, exaggerated salivation, bronchorrhoea, diarrheas, and some claim, in lactorrhoea. Ebstein obtained good results in the salivation of a hemiplegic. In phthisis atropine combats the sweats, the diarrhea and the cough. In bronchorrhoea it calms the cough, lessens the reflex irritability of the mucosa, checks the hyper-secretion and acts as an antispasmodic. In incontinence of urine it lessens the hyperesthesia of the vesical mucosa. It subdues the irritability of the uro-genital mucosa in spermatorrhoea.

In the choleras, Asiatic, infantile and morbus, Brunton has pointed out how exactly atropine antagonized the pneumogastric irritation constituting the disease, and Hankin first proved the truth

of the deduction by using atropine in Asiatic cholera with remarkable success. In cholera infantum a hypodermic of atropine, suited to the age, gives speedy relief; but should not be relied upon to the neglect of intestinal antiseptics.

Its sensory-paretic action renders it of value in neuralgias and in some neuroses; trigeminal, odontalgia, otalgia, sciatica, epilepsy, chorea; in neuralgia, combining with morphine, strychnine, quinine, aconitine; in chorea with salicylates, arsenates, vermifuges, strychnine, brucine; in epilepsy with glonoin, cicutine, verbenin.

Atropine valerianate has been recommended in epilepsy by Schroeder van der Kolk and many others; but not in *grand mal* due to sexual excitation.

In eclampsia and hysteric spasms it has been administered with varying results. When glonoin is given in the first stage of epileptic spasms to dilate the cutaneous vessels, atropine should be added to prolong the effect.

Of late atropine has been very largely used to supplant opium as a remedy for pain. So many varieties of pain are amenable to atropine, and the danger of forming an atropine habit being absolutely *nil*, the tendency is to be favored. In neuralgias, the pallid, shrunken skin, contracted pupil, weak, repressed pulse, are directly antagonized by atropine, which recalls the blood to the surface and relieves the internal congestions. In spasmodic pains of every description, atropine is also the direct physiologic remedy.

In hemorrhages of every variety atropine has proved one of the most powerful hemostatics. A full dose should be given at once, hypodermically, enough to flush the skin. If the blood be with-



Phytolaccin has been recommended for rheumatism, dropsy, syphilis and scrofula and in scurvy, as a gland cleanser.

The man who adores morphine is a dangerous citizen and a poor sort of a doctor, not to be trusted in an emergency.

drawn from the bleeding vessels to the skin it is necessarily out of danger.

Many persons can break up a commencing acute catarrh by taking a full dose of atropine.

In combating morphine poisoning atropine should be given in doses of 0.002 (gr. 1-30) repeated hourly until symptoms of atropine are manifest, such as dry mouth, reddening face, bright eyes, dilating pupils. Beyond the beginning of toxic action it is unsafe to go, especially as the antidotal effects of atropine do not cover the entire range of action of morphine. And in poisoning by the galenic preparations of opium it is well to remember that the convulsant effects of atropine may be aided by an unusual proportion of the tetanisant alkaloids of opium, thebaine, laudanine, etc. The cardiac and respiratory depression of opiates are antidoted by atropine, and its use is to be directed solely against these features of opium poisoning, by no means against the somnolence.

Atropine is indicated in the cerebral inflammations with retarded pulse, and in eruptive fevers with delayed eruption and evidences of a nervous system overwhelmed by the onset of the malady.

In grave collapse in any form of narcotic poisoning its property of allaying the excitability of the cardiac vagus extremities can be utilized.

As an oxytocic atropine may be employed alone or combined with ergotin, strychnine or macrotin.

ADMINISTRATION.

It is in all cases best to administer atropine by the intensive method. The dosimetric granules are all too large for accurate dosage. One containing gr. 1-1000 would be preferable. Of these

one may be given to an adult, best in solution, every five to twenty minutes, according to the urgency of the case, until the first evidence of action is manifest. This is almost invariably dryness of the mouth; only exceptionally do any of the classic symptoms precede this. When this dryness is felt it is time to stop the drug, as the full benefit has been secured, and if full relief has not ensued, some other remedy is needed, or surgical intervention. This does not apply in poisoning cases.

Children bear atropine well, in larger doses proportionally than adults, but not all children. Double the dosage by Shaller's rule with all but flaxen blondes, and halve it with them.

When the dose for a patient has been determined with accuracy this may be given with advantage at once, especially when dealing with neuralgias and neurones, where it is an advantage to deal a staggering blow to the malady at the outset, and timid medication will fail. So in urgent cases, cholera, colics, etc., it may be best to give a full dose at once.

Van Renterghem's advice as to adjuvants and combinations, given above, can be largely extended, by adding each other remedy indicated in each particular case. Obviously, we can only supply the ingredients and general directions; Whether the cake will turn out satisfactorily must depend on the cook.

Liniments containing atropine are usefully applied to the soles of the feet in hyperidrosis. Atropine represses the secretion of milk when applied to the breast. The local uses of atropine are as legitimate in liniments and plasters as in solutions applied to the eye.

Atropine is rapidly excreted by the kidneys. It enters the milk and the fetal



Phytolaccin may be given to dissipate the enlargement of orchitis after the acute symptoms have subsided.

Phytolaccin is useful to dissipate gland enlargements, acute and chronic. Give gr. 1-6 every hour while awake.

circulation, and should not be given to a nursing mother.

In poisoning by atropine, the convulsions may be controlled by ether, the heart and respiration sustained by caffeine. Recovery is the rule.

Death has resulted from the use of 0.12 (gr. 1 5-6) of atropine internally, and in the case of a consumptive, of only 0.04 (gr. 2-3).

Appended is a list of maladies in some phases of which atropine has proved of benefit:

THERAPEUTIC SUMMARY.

Abortion: Increase uterine contractions and checks hemorrhage.

Abscess: Apply locally to abort by vasodilation, and relieve pain.

Acidity: Checks hyperchlorhydria.

Acne: For greasy skin with free sweating.

Adenitis: Locally, relieves pain and favors resolution.

After-pains: Steady contraction relieves pain.

Alcoholism: The basis of all secret cures; fullness of the head it causes renders the liquor effect disagreeable.

Aphonia: The hysteric form has been relieved by full doses.

Asthma: When the skin is cool and moist, sputa loose.

Bladder, Irritable: Sedates irritability, checks nocturnal enuresis.

Boils: Applied in plaster, relieves pain and hastens maturation.

Bronchitis: To check profuse mucous flow, bronchorrhea, to relieve irritative cough.

Calculi, Biliary: To relax spasm of ducts and let stone pass, easing pain.

Calculi, Renal: To relax spasm of ureter and allow stone to pass.

Cataract: Immature forms benefited by instillations.

Catarrh, Acute Nasal: To abort the attack and dry up secretion.

Cerebral anemia: To increase temporarily cerebral blood supply.

Cerebral congestion: For less active forms of hyperemia.

Cholera Asiatica: Directly opposes the vagus irritation indicated by symptoms, for cramps, pain, diarrhea.

Cholera Infantum: Same as preceding.

Cholera Morbus: Same as preceding.

Chordee: Relieves all but febrile cases.

Chorea: For cerebral anemia, as antispasmodic, as hypnotic in small dose.

Colic, Intestinal: Relieves spasm, pain, constipation.

Colic, Lead: The best remedy for pain, spasm, obstruction.

Constipation: Small doses paralyze inhibition, allays spasm.

Convulsions: For congestive, teething or whooping-cough forms.

Cough: Spasmodic, nervous, sympathetic, asthmatic, allays irritation.

Croup: Relieves irritation and stimulates respiration.

Cystitis: Relieves irritability, breaks attacks due to catching cold.

Delirium: Relieves that of cerebral anemia.

Delirium Tremens: For insomnia with cyanosis, cold skin, coma vigil.

Dementia: Stimulates cerebral circulation, relieves insomnia.

Dengue: For sweating stage, when excessive or weakening.

Dentition: For the convulsions.

Diabetes Insipidus: Checks excessive flow.



Phytolaccin is especially satisfactory in combating inflammation of the mammary gland, acute or chronic form.

For many pains morphine may give enough temporary relief to hide the true state and prevent proper treatment.

Diarrhea: Checks excessive flow, choleraic, colliquative, irritative.

Diphtheria: Given early, aborts exudation, later to sustain heart, when throat and tonsils are acutely inflamed and swollen.

Dysmenorrhea: For spasmodic or neuralgic cases, dark fetid discharge, crampy pains and chills.

Dyspepsia: To relieve constipation and gastralgia, check hyperchlorhydria.

Dyspnea: Relaxes spasm.

Dysuria: For strangury, bloody urine.

Eczema: For eczema of the hand.

Emissions: For atony and relaxation of genitals, both sexes.

Emphysema: Relieves the dyspnea.

Enuresis: Nocturnal, of children, full dose at bedtime.

Epilepsy: For nocturnal, too sound sleepers, *petit mal*, to dissipate cerebral anemia of first stage.

Erections: Are strengthened by full doses and fear allayed.

Erysipelas: Superficial non-vesicular forms, adynamic phlegmonous or cerebral.

Erythema: To wind up protracted attacks.

Eye Affections: Especially for iris maladies.

Feet: For fetid perspiration.

Fevers: For delayed eruptions, insomnia and low delirium, photophobia, hebetude, hemorrhages, to sustain heart.

Gastralgia: To relieve neuralgic pain.

Gastric Ulcer: To stop pain and vomiting, check acid production.

Glottis, Oedema: It may prove capable of drying up the effusion.

Gout: Very effective in relieving pain of gout of stomach.

Hay fever: By drying up the secretion gives temporary relief.

Headache: Breaks up attacks of excessive meat-eaters. For pain over eye, photophobia, intolerant of noise or motion, uterine, gastric, in young women; face pale and skin shrunk pulse small and contracted.

Heart Diseases: For irregular rhythm, cardiac strain.

Hematemesis: Full doses stop bleeding.

Hemoptysis: In full doses probably the best, strongest and quickest.

Hemophilia: Success reported recently in checking hemorrhages.

Hemorrhage, Rectal: Has been highly recommended.

Hemorrhage, Puerperal; The quickest, strongest, best hemostatic.

Hemorrhoids: To stop bleeding and relax spasmodic sphincter.

Hernia: To relax strangulation, full doses.

Herpes Zoster: To relieve pain.

Hiccough: Full doses, to relieve spasm, with strychnine to steady nerve.

Hypochondria: For cerebral anemia, general relaxation, sexual atony.

Hysteria: For convulsions, aphonia, puerperal forms.

Impotence: To strengthen erections and relieve nervous dread.

Influenza: For headache, acute attacks, free sweating or other discharges.

Insomnia: For prostration, low arterial tension, contracted pupils, frontal headache, over-use of eyes.

Intestinal obstructions: Full doses to relax spasm and relieve pain.

Iritis: Dilate the pupil fully, by local or general use.

Keratitis: If ocular tension be low, contracts vessels, limits inflammation.



About all the preparations offered for the reduction of obesity contain phytolaccin. It is of value if used rightly.

For the pain of obstructed circulation morphine may give enough relief to mask the malady till gangrene results.

Labor: Stimulates uterine contractions, lessens pain and bleeding.

Lactation: Checks flow of milk. Affects nursing.

Laryngismus Stridulus: Cuts short the paroxysm.

Locomotor Ataxia: Recommended by Brown-Sequard.

Lumbago: A hypodermic relieves acute attacks.

Mania: Allays irritation, induces sleep, quiets delirium, for nymphomania, hypochondria, delusions or persecution, whenever it is desirable to stimulate the cerebral circulation.

Mastitis: Relieves congestion and dries up milk.

Measles: Depression of vital powers, low temperature, delayed eruption.

Melancholy: For constipation and low arterial tension.

Menorrhagia: The best of the hemostatics.

Myalgia: Hypodermic to abort acute attacks.

Myelitis: For traumatic cases and anemic conditions.

Nephritis: For irritation and pain in kidneys in acute form.

Neuralgia: Full dose at once to break up attack. Sciatica, lumbago, uterine, ovarian, intercostal, dysmenorrheal, tic, spinal irritation.

Obesity: To check excessive sweating.

Oesophagismus: To relax spasm, ease irritable stricture or ulcer.

Orchitis: As soon as the acute symptoms subside.

Otalgia: For children, with coryza.

Otitis: To relieve pain.

Ovarian Neuralgia: The best remedy, says Waring.

Paralysis: For chronic myelitic paresis.

Perspiration: For phthisis, debility, relaxation of weak children.

Pertussis: To abort attack in incubation, check spasm and secretion.

Pharyngitis: Relieves pain and fever, aborts attack.

Photophobia: Dilate the pupil.

Phthisis: For colliquative sweats, diarrhea or bronchorrhea, irritative cough, dyspnea.

Pleurodynia: For all but rheumatic or uterine forms.

Pneumonia: In the first stage, infants, to check secretion.

Prostatorrhoea: To check discharge and subdue irritability.

Pruritus: For obstinate cases and those due to sweating.

Rectal Ulcer: Relieves pain, especially burning after stools.

Rheumatism: Excessive sweating may demand atropine.

Roseola: For the sore throat and sweating, delayed eruption.

Scarlatina: To bring out delayed eruption, for sore throat.

Sciatica: Hypodermic down to sciatic notch.

Scurvy: For excessive salivation or relaxation.

Sea-sickness: Empty bowels and bring under atropine to prevent attack.

Sneezing: Dries up secretion and allays irritability.

Spasm: For local muscular spasm, sphincter, hysteric, anemic, teething.

Spermatorrhoea: For relaxed genitals, nocturnal emissions, no orgasm.

Sunstroke: For heat exhaustion, all cases with low arterial tension.

Syncope: Glonoin at once, atropine to prolong cerebral hyperemia.



Phytolaccin has been recommended with aconitine for diphtheria and in the treatment of tonsillitis. Dose gr. 1-6 hourly.

For spasmodic pain morphine is inferior to atropine, glonoin and strychnine arsenate, with chloroform if needed.

Tetanus: Injected near wound has cured.

Tonsillitis: With aconitine used early will abort attack.

Trismus: Inject into affected muscle.

Typhoid Fever: Contracted pupils, low muttering delirium, weak heart.

Ulcers: Has remarkably favorable influence over their course.

Urticaria: Gives temporary relief.

Variola: Low muttering delirium,

prostration, delayed eruption danger.

Vomiting: Relieves that of pregnancy, if neurotic.

This list merely comprises some uses of atropine that are well known to every practitioner. Many others will suggest themselves to our readers, and of equal importance with the foregoing. In truth, it is doubtful if any other single drug does as many things as this, and does them as well.

Chicago, Ill.



SMALLPOX: ITS DIAGNOSIS AND TREATMENT.

By Theodore W. Peers, M. D.



DIAGNOSIS:—It is of great importance that an early diagnosis of smallpox be made, so that proper isolation may be maintained, but in my experience the disease is only very feebly contagious for the first five or six days. This is most fortunate, for in many cases an earlier diagnosis is impossible.

We may describe a typical case of discrete smallpox as follows: About twelve days after the person has been exposed, he suddenly feels slight chilly sensations passing over him. He seldom has a distinct chill, but the chilly feeling is deep in and lasting. Very soon fever comes on, but the chilly sensation continues and he begins to ache. The locations of the severest aching are lumbar region, back of head and sternum; though many say they ache "all over clear to the bones." The patient is too sick to sit up and, as a rule, goes to bed and covers up warm. He then begins to perspire and becomes nauseated and usually vomits, or at least makes the effort. If he sits up or attempts to stand up, his head swims, and

he has to go back to bed. The fever rises, ranging from 102 degrees to 105 degrees and continues for two to four days and is associated with one or more or all of the above symptoms. Not infrequently there is delirium and the books say, convulsions in children, but I did not see a single case ushered in in that way.

On the third, fourth and fifth day bright red macules about the size of the lead in a lead pencil begin to appear on the forehead at the edge of the hair, and soon after show on the wrists, arms and hands; then spread over the face, through the hair, over the neck and arms and sparingly over the trunk; more thickly over the legs and feet. The last to come out are on the palms of the hands and soles of the feet. In six to twelve hours from their first appearance these macules become papules and feel like a shot or hard substance in the skin. On the second or third day from the first appearance of the macule, the papule changes to vesicle, and begins to get larger. The vesicle is at first pointed or



Phytolaccin has been recommended as a remedy for stomatitis. Let a granule dissolve in the mouth every hour.

For neuralgic pain morphine is inferior to aconitine, atropine, glonoin, local heat, elimination and strychnine arsenate.

cone-shaped and very small, involving only the center of the papule. As it enlarges it takes on a rounded form and fills with a clear fluid, which soon becomes milky. This milky appearance shows first on top and in the center of the vesicle and gives it an umbilicated appearance, which is, however, only in appearance, for if a pencil or anything with a straight edge is placed over the spot it can be seen that it touches the center of the vesicle first. A few vesicles may be truly umbilicated and, in exceptional cases, many are so; but I desire to emphasize the fact that umbilication is not the rule and may be absent. Most of the books make much of umbilication and in this way lead one astray on a diagnosis. If umbilication is present, it is only at the time when the vesicle is attaining its complete size, for as soon as pustulation begins, the pock is raised and rounded and umbilication disappears.

On the seventh or eighth day of the disease one of two things takes place: *First*, the vesicle begins to scab, the scab forming first in the middle of the most elevated portion, and in three or four days the scab falls off or can be pulled off, leaving a reddened spot that is not at all raw. *Second*, the vesicle begins to turn yellow and pus forms which in about three days begins to harden and form a scab; the scab is ready to come off in three to six days from the time it begins to form.

In other words, if pus does not form, the duration of the disease is shortened three to seven days. If pus does form, then we are apt to have what is called the secondary fever, even in a discrete form of the disease.

I shall not describe the confluent form,



Phytolaccin is about the only remedy that has ever been recommended for mumps, metastatic to the testicles or ovaries.

as that presents no special features difficult of diagnosis, but shall confine myself to modified smallpox, it being the form in which the diagnosis is difficult.

This epidemic has been called impetigo contagiosa, and barber's itch, and some writers differentiate between it and syphilis, measles and scarlatina. In my opinion, however, the only disease that can be mistaken for it by well posted physicians is chickenpox. I shall, therefore, differentiate only between smallpox and chickenpox. In making this comparison I shall follow a table of diagnosis found in Taylor and Wells' Diseases of Children, page 684.

1st. Initial stage.

Most of the books say the initial stage is of three days' duration and is characterized by severe symptoms of back and head aching, high fever, chills, vomiting and delirium, but in the present epidemic I have seen many cases where the symptoms were so mild that it was necessary to question very carefully and even suggest symptoms before the patient would admit that he had been sick in any way, and a large percentage of the cases worked until the eruption appeared.

2nd. Time of eruption.

According to the books, the first of the eruption is macular and appears at the end of the third or beginning of the fourth day. If this were always true, then the present epidemic could not be smallpox, for the eruption appears again and again in from twelve to forty-eight hours after the initial symptoms.

3rd. Vesicle umbilicated, multilocular and does not collapse.

This statement of the books, except Dr. Palmer's, was most puzzling to me, as very few of the vesicles were umbili-

For inflammatory pain morphine is inferior to aconitine, elimination and local heat, treating the cause and vasomotor state.

cated. They also uniformly collapsed when pricked with a pin and in the whole epidemic I did not open a single vesicle that was multilocular so that on pricking one side it would collapse, leaving the other side full. I saw many that would not completely empty themselves when pricked, but a little pressure would cause them to do so.

4th. Eruption thickest on face and extremity.

This was uniformly true, and the trunk in front and over the back was seldom more than sparingly covered, except in very severe cases, where it completely covered the face.

5th. Eruption all out in twenty-four hours.

One of the diagnostic points emphasized by most of the books is that in smallpox the eruption comes out all over the body in about twenty-four hours, while in chickenpox it comes out in "crops" and you may have them in various stages side by side. In smallpox, they maintained, you would not find a papule, vesicle and pustule side by side, but might find a pustule on the face with a vesicle on the foot, as the eruption first appears on the face and finally on the feet.

It was the usual occurrence in the present epidemic for the eruption to appear in crops, and I have seen cases where new spots appeared every day for a week, and where macule, papule, vesicle and pustule were but a few inches apart. This was true, however; the scabbing and healing of the skin under the scab was usually completed within a day or two, showing that the spots last to appear made a more rapid progress than those showing first.

6th. Toughness of skin over vesicle.

My experience was that the skin was tougher than in chickenpox. If a needle were thrust through the top of a vesicle it was very difficult to tear through the skin by lifting on it, while in chickenpox it can be easily done.

7th. Duration of disease.

Most of the authorities give the duration of smallpox as ten to fourteen days and of chickenpox as five to seven, but many cases of this modified form only lasted a few days. I desire to relate my personal experience and observation on this point. On Oct. 4th, 1899, I was taken with chilly sensations, severe fever, severe aching in back and limbs, nausea, dizziness and sweating. I called in my good friend, Dr. ———, and we both agreed that I had a malarial attack which needed calomel and quinine. I was in bed three or four days, when I resumed my business. I am now fully convinced that I had an aborted attack of smallpox, as I saw a number of persons during that winter who had similar attacks, after being exposed to smallpox. I have seen this aborted form of smallpox last from one to five days with no eruption. I have also seen cases aborting in from five to ten days at various stages of the eruption. From this we may conclude that the disease may abort with the eruption at any stage before pustulation.

8th. Secondary fever did not occur unless pustulation occurred, and not always then.

9th. Course of eruption.

In smallpox eruption follows a definite course marked by macule first, then papule, then vesicle, then pustule and then scab. This sequence was uniformly observed. In the aborted cases the progress was stopped, but as far as it went it

Phytolaccin is thought to possess specific virtues in hemorrhoids, rectal ulcer, fissure, prolapse, and all rectal ails.

There is not a single use to which morphine can be put for which the alkaloidal list does not furnish a better remedy.

followed the above sequence. Through the courtesy of Dr. C. E. Munn I have had access to an excellent article written by Dr. C. G. Elliott of Blackwell, Oklahoma, who had charge of an epidemic in which there were 1,853 cases. He says:

"In diagnosing our cases we had to discard the following symptoms as described by the text-books:

1. Severe pain in the back and rigors.
2. The hard shot-like feeling of the papules.
3. The characteristic umbilication of pustules.
4. The appearance of pustules all at once or in one crop.
5. The pustules were not deep-seated.
6. There was no secondary fever.
7. There was no characteristic odor.
8. There was no intense pain, burning and itching from pustules."

I also give his diagnostic symptoms, but condense them for the sake of brevity.

1. A contagious eruptive disease. Incubation eight to fifteen days.
2. Initiatory symptoms in part of the cases.
3. The eruption papule, vesicle, pustule.
4. Adults and children equally affected.
5. Eruption first on face, hands or wrists.
6. Vaccination prevented disease.
7. Pustules appearing on palms of hands and soles of feet.

My own conclusions in regard to diagnosis are as follows:

The initial symptoms that are most frequently present are six in number: Chilliness, fever, aching, nausea and vomiting, sweating and swimming in the head. These are not all present in every

case, but are in a decided majority of the cases; and even in those cases who say they were not sick at all, careful inquiry will usually develop the fact that several of the above symptoms were present, especially chilliness, swimming of head, nausea and sweating.

There is not usually a distinct chill, but a feeling of chilliness, particularly when exposed to a draft, which lasts, off and on, until the eruption appears. The fever varies greatly, all the way from 99 degrees to 105 degrees. The aching is located as follows in frequency, small of the back, back of head, sternum and all over. There is usually vomiting, but not persistent, and may be only nausea. The swimming is one of the most constant of symptoms. It is not exactly a dizziness, but is better expressed, I think, by the word swimming. The sweating may or may not be profuse, but is apt to be persistent, coming and going until the eruption appears.

If these symptoms exist, and particularly if they continue for two, three or four days, and suddenly disappear, when a macular, changing to a papular eruption, shows itself on the forehead near the hair, one may quite surely diagnosis smallpox.

The diagnostic points of the eruption are:

1. A uniform sequence of macule, papule, vesicle, pustule and scab. In chickenpox it is macule, vesicle, scab.
2. The papule is usually the size of the lead in a lead pencil, and begins to enlarge at once. When the vesicle first forms it is most often conical, and gradually becomes rounded as it enlarges. The vesicle finally reaches in size the diameter of a slate or even at times, a lead pencil. When the pustular form



The dose of phytolaccin is gr. 1-6 every hour till relief or slight nausea is experienced, unless the pulse weakens first.

When haste is needed, in treating syphilis, give mercury pill gr. j every hour until the gums are touched a little.

is reached, growth stops. The pustules in each case are of quite uniform size, and differ more in different cases than on different parts of the same case. In chickenpox the vesicles do not grow; are flattened from the first and vary largely in size on different portions of the body.

3. In modified smallpox the skin over the vesicle is tough, and when pricked in the center and the serum squeezed out there remains an umbilicated spot with decidedly raised edges. The vesicle often refills after being pricked. In chickenpox the skin is thin and can easily be broken, the serum flows out without pressure and leaves a flat spot which does not refill with serum.

4. The eruption quite uniformly appears first on the forehead near the hair, sometimes on the wrists or forearms. In chickenpox it is seen first on the back, sometimes on neck or face.

5. In modified smallpox the eruption is most plentiful on the face, wrists and ankles; and the soft palate and palms of hands and soles of feet are attacked quite often; while in chickenpox the back is the part having the most spots, and the face, extremities, palms and soles and soft palate are sparingly attacked, if at all.

6. The scab in modified or regular smallpox is composed of two things, the epidermis and the dried contents of the vesicle or pustule. This mass is brown in color and usually comes off attached to the epidermis and can be scraped off of the epidermis. At times it remains on the person—the epidermis only coming off—and it can then be picked off. In chickenpox the serum in the vesicle seems to be absorbed, for the scab is little more than epidermis and usually quite

friable. I had not seen this distinction in any of the text-books, but it has been true in most all of the cases I have seen, and I mention it for the consideration of others.

7. Modified smallpox attacks adults and children with equal frequency, while chickenpox is almost exclusively a children's disease.

8. Vaccination modifies the severity and often prevents smallpox, while it has no such action in chickenpox. Dr. Elliott's experience was remarkable in that not one of the 1853 cases had been successfully vaccinated within seven or eight years. My experience was that about 40 per cent of the cases had been previously vaccinated and many had been vaccinated recently. My belief is that anyone may be made an immune by vaccination, but he must be vaccinated at short intervals, say two to four months until we *know* it will not take. I saw about twenty persons who had modified smallpox twice within four months. I also had vaccination take normally, in a family of five, two months after each one had had modified smallpox. I, therefore, believe that persons should be vaccinated after recovering from modified smallpox.

Treatment:

The best treatment for modified or regular smallpox is prevention, by vaccination. I believe it could be absolutely annihilated if every baby could be vaccinated three times within one year and then revaccinated every fifth year. With our present knowledge of aseptic vaccination and our power to control sepsis in the few cases that become infected, no one need dread to be vaccinated by a well-informed physician. Most of the text-books say that nothing can be done

In the treatment of syphilis and other glandular cachexias, it is wise to add phytolaccin to stimulate absorption.

For biliousness, indigestion, duodenal catarrh, irritative dyspepsia, fermentation, give mercury yellow oxide gr. 1-134.

to abort or modify the severity of small-pox, but in my opinion it may be aborted at times, and in most of the cases proper treatment will lessen the severity of the disease and scabbing may be hastened by from five to ten days.

First, the abortive treatment. This must be used before the rash appears, and the sooner used the more prospect of success. It consists in giving a free catharsis and twenty to thirty grains of quinine every twenty-four hours until the rash appears. Suppose we know a person has been exposed. On the twelfth day he begins to ache and chill. I at once put him on $\frac{1}{2}$ grain calomel triturations every half-hour until he has taken ten or his bowels begin to move. I then give a tablespoonful of epsom salt in a half-pint of hot water, and in about an hour begin on the quinine, giving four to six grains every half-hour for five doses. In twenty-four hours from the first dose of calomel I give him another dose of salts and repeat the dose of quinine, and if the rash has not appeared in twenty-four hours I repeat for the third time. I have faith in the effectiveness of this treatment for in the twenty or thirty cases in which I used it I had five or six who had absolutely no eruption, and every other case was very mild. I desire to say that Dr. A. B. Palmer advises the use of large doses of quinine with the possibility of cutting short the disease, but I did not read his article until I had tried the above treatment several times. I did not use quinine after the eruption was well out.

As soon as the eruption appeared I used an ointment consisting of \mathcal{R} . Campho-phenique (or camphorated phenol) \mathcal{I} dram olive oil \mathcal{I} oz.

Sig. Rub on with finger every three



Mercury and iodides always do better work when phytolaccin is added to promote the quickest elimination of drug and waste.

hours or oftener if there is burning or itching.

Internally I use $\frac{1}{2}$ grain of calcium sulphide every four hours and see that the bowels are moved at least once a day. As soon as the vesicles are "grown" and their contents become milky I have them opened and their contents evacuated by gently pressing with absorbent cotton. The best way to open them is with a razor-sharp knife, shaving the top of the vesicle or pustule off. If a needle is used the vesicle refills and the work has to be done over. After they are evacuated I have the ointment rubbed on as before. Just as soon as the scab forms and can be picked off without leaving a raw surface, I have it done, and when there is not one single scab left on the body, they are ready to be disinfected. For this purpose I used Parke Davis & Co.'s Germicidal Soap with entire satisfaction.

This plan of treatment is based on the following principles. The disease is probably a germ disease even though the germ has not yet been isolated and by free catharsis we free the alimentary canal of most of them and the quinine kills most of those in the tissues.

After the eruption appears the danger, in my opinion, lies in the formation of pus, and the intention of the treatment at that time is to prevent, so far as possible, its formation, and when it exists to get rid of it as quickly as is possible.

Topeka, Kas.



We have heard of blockheads, and sometimes of wooden-headed people; but a correspondent speaks of a patient as having a lumber spine.



Try myrrhic acid in leucorrhea dependent on relaxation and any other form of free mucous secretion, not acute.

ALKALOMETRIC THERAPY IN DISEASES OF THE LIVER.

(L'Alcaloidotherapie Dosimetrique Dans Les Maladies Du Foie.)

By Dr. E. Marty.

A communication made at the Vith Congress of Internal Medicine at Toulouse, April 1 to 4, 1902, "La Dosimetrie," Jain, 1902, Paris. Translated for THE ALKALOIDAL CLINIC by Dr. Epstein.

THE studies in experimental physiology especially those more important ones in clinical physiology, have greatly enlarged of late years our knowledge of the biologic and nosologic action of the liver.

Experience with sick animals and human beings, physiologic experiences resting on observed clinical facts and autopsies made have demonstrated the importance of this organ from the viewpoint of nutrition and assimilation.

Already in fetal life this organ plays a preponderating and essential part, and later on after birth when the other organs diminish a little its depurating function, it still continues to maintain its importance, amounting almost to an autonomy, with which the clinician may have to reckon at any moment.

Its many functions such as the secretion of bile, transformation of the products of digestion, the production of glycogen, lastly the destruction of the poisons which are either introduced into it or formed in it; all these make it necessary that the cells which constitute this organ should guard constantly and absolutely its individuality and integrity. When one of its functions is abolished, the rest of them will suffer a considerable blow. If the hepatic cells are sick there comes to be, in place of the true biliary pigment urobilin; the glycogen is not produced at all and the sugar materials pass unutilized; the urea, that most valuable diuretic and product of com-

plete disassimilation, is replaced by products of incomplete disassimilation, which are very poisonous; the peptones and the fats are but insufficiently transformed; lastly the toxic substances produced by vital action are no longer arrested or destroyed. The results of this insufficiency are rapid denutrition and intoxication of the entire organism. The kidney may for a while compensate this deficient state of things, but becoming itself overburdened with work, it too succumbs at last under the repeated and constant efforts of its living cells. Very soon it suspends its labors, and then nothing can save the patient any more.

Dr. Burggraeve, the founder of the dosimetric use of the alkaloids, well understood the complete part of the liver's actions when he said:

"The liver is the great factory of the economy; there the blood is elaborated, and the ancients mistook only by half when they made it the focus of nutrition.

"We know the famous epitaph of Bartholini on occasion of the discovery of the lymphatic vessels, yet in spite of it the liver is what it always was, the grand organic factory. It is there where the blood unloads fuliginous parts, which without doing so it would be a black opaque liquid incapable of nourishing and inciting our tissues.

"It is not to be wondered, therefore, that many organic affections of the liver give rise to glycosuria and to an atrophic condition of the tissues, since the pres-

The lymph spaces and channels encumbered with debris, is always a good indication for the use of phytolaccin.

Give myrrhic acid in amenorrhea with scanty and painful menstruation. It has all the virtues of myrrh in pleasant form.

ence of the sugar materials are needed for the development of organic cells."

And as according to his mind medicine ought not to be a mere unprofitable natural history, but that all clinical observations ought to aim at one rational therapy that should be useful to the patient, so he indicates there at once the general line of action to be pursued.

"One important point is," says he, "that the discharge of the liver should be made as regular as the depurating apparatus in a steam factory.

"We should elaborate the bile by means of caffeine and facilitate its elimination by quassin; two or four centigrams (equals about gr. 2-6 or 4-6) of the first, and as many milligrams (2-67 or 4-67 of a grain) of the second, taken before meals, will give the desired effect.

"These are to be joined with strychnine if there is ever so little stomach pain, and according to indications we may add hyoscyamine against spasms, veratrine, aconitine, and quinine against hyperemia."

Poucell expresses it nicely when he says: "The liver is to vegetative life what the brain is to the life of organic interrelation."

Elsewhere the same author demonstrates most evidently and precisely that it is a hepatic lesion which produces slowly and without any violent fit the alteration in the blood plasma, by furnishing an abnormal bile, by imperfectly elaborating the absorbed material, by insufficiently depurating the blood from organic wastes, and by badly preserving it against the poisons which come from the intestines; it is these that constitute chronic congestion.

This affection is so common and so widely extant, that no one, especially the people who lead a sedentary life, can flatter himself to be free from it. It is this that greatly complicates diseases and adds to them a serious factor, which ought to be averted in advance and so enable us to fight against them advantageously and annihilate them.

Whether it be heredity, on account of which one may be born with a tendency to abnormal nutrition, and whether it is in the liver, the organ that forms living matter, that this hereditary influence manifests itself, or be they depressing moral influences that produce the same trouble by the action of the vasodilators, which innervate organs from out of the solar plexus, or be they supplementary congestions from excessive temperatures or gastrointestinal troubles, or prolonged intoxications that enter into play, the consequence will always be an active congestion of the liver.

And if we add to the above tableau the other secondary congestions, which do not come from the portal system but from the subhepatic veins, which are the habitual phenomena of cardiac and pulmonary affections, we shall then have traced the complete cycle of everything that can be reported about this organ, either as to the alteration of its parenchyma or disorganization of its functions.

2. It is in studying all these causes in the facts of various clinics, it is after having elucidated well certain obscure points that one can lay down the indications and mode of administration of the alkaloids in the congestions and insufficiencies of this organ.

The advantages of dosimetric alka-



Mud in the channels. This is the reason for administering phytolaccin. Did you ever happen to think of that?

The dose of myrrhic acid is gr. 1-6 every hour or even more frequently until the desired effect is manifested.

loidotherapy ("Alkalometry," for short.—Tr.), are here the same as in other diseases.

The greatest number of you, gentlemen, wishing to divest yourselves of all preconceived ideas and sentiments, will agree that all the interest we have here is to replace with an always identical quality and a convenient form, those infusions, tinctures, and extracts which vary in the following points:

1st. The place whence the plant comes.

2nd. Its degree of maturity when gathered.

3rd. The mode of preserving it.

4th. The action of alcohol on its texture; and in many other points.

Moreover, when one refers to his thoughts at the bedside of any patient, the same problem will always have to be solved over again, viz.: What is the quantity of the remedy to be administered in order to reestablish the normal physiologic equilibrium? Of the three problems to be solved at the bedside, the patient and the disease can be solved by examination and observation; and the third, the remedy, can be cancelled by the method of administering alkaloids in fractional doses, which must be very small since we deal here with very active medicaments, which represent chemically pure agents in minimum quantity and maximum force. With such a remedy we can influence the vital dynamism with mathematic precision, and introduce into the cellular element perfectly assimilable substances, which are destined to make the normal physiology to prevail over the pathologic physiology.

"One single argument," says Dr. Le Grix, "is enough to show how the method of small doses is alone able to

determine exactly that unknown quantity of the medicament necessary to jugulate this or that affection.

"Supposing 40 to be the number representing the necessary and useful therapeutic effect; then the surest means of arriving at that number is to count by single units. If one wished to count with many units as a point of departure, then it is to be remembered that the greater the multiplier will be, the greater are then the chances of passing beyond the useful dose.

"Supposing 25 represent the dose to be administered, then if you multiply by two you pass already by ten the necessary total.

"Hence, the smaller the multiplier the surer one has the possibility of arriving at the X, and if one should pass it, it will be by an insignificant fraction.

"Dosimetry is, therefore, a wise and rational method. In practice we give a small initial dose, and repeat it every two hours, or one hour, or half hour, even every fifteen or ten minutes, according to urgency, and we run no risk of intoxication in spite of the high dose taken.

"When the therapeutic effect is obtained, that is the X we wanted, then the medication ceases, or the intervals of it are made more distant, or it is replaced by another more suitable one."

In hepatic insufficiency this method constitutes the best means of rapidly subduing the disease.

3. The first care is:

1st. *To reduce the toxicity of the intestinal center.* For this we make immediate use of that mild laxative, the seidlitz (the same as our Abbott's Saline Laxative), which does not provoke an intense congestion, brings on the intes-



In impotence, if it ever really needs phosphorus, give the safer and more manageable zinc phosphide, gr. 1-6 t. i. d.

Picrotoxin has been used with success as an antidote in poisoning by morphine, chloral and chloroform. Give to effect.

tinal secretion without leaving after it a reactionary constipation as violent purgatives do.

This primary arm can be very easily graduated, and when it does its work, it affords what is called a white bleeding (*Saignee blanche*) of the portal system and the hepatic gland. This effect is further assisted by those alkaloids whose property it is to act against intestinal torpidity, by increasing peristaltic action of the intestines and preventing the stagnation of matter there, a circumstance most favorable for autointoxication.

Jalapin, the active principle of jalap, recommends itself at once for its energetic and yet mild action. It purges without effort, without colic, and acts remarkably as a tonic of the cecum and large intestine, which tonic causes them to evacuate their contents rapidly. It has the advantage of continuing its efficacy in spite of repeated use, and is applicable to all ages. Infants tolerate it very well and receive great benefit from it at their earliest days.

The study which I have made of this alkaloid makes me believe that being absorbed in great part or perhaps entirely, it is then destroyed by the blood. Certain it is that it is not found in the urine or in the feces. The dose of it to be adopted is from five to ten milligrams (equals gr. 1-13 to gr. 1-6).

Bryonin, the active principle of bryonia, exercises an elective action, like jalapin, on the large intestine principally. Although it is also a tonic excitant of the stomach, still its action becomes principally plain on the cecum, where it terminates advantageously the digestive process. Its importance is greater than one might suppose. It would be desirable if its employment were more general in all the affections

where a derivation from the intestines is useful and frequently salutary. The dose is five milligrams and, like jalapin, it joins its action to that of the laxative that was given before it.

Colocynthin, the active principle of colocynth, will serve in venous stasis of the liver consequent upon a difficult circulation in the portal vein. Colocynthin is more irritating than jalapin or bryonin, but it produces copious biliary alvine discharges, which cannot but benefit the patient.

Cascarin, the active principle of cascara sagrada, has a more general action than the active principles mentioned before. It stimulates intestinal contractility, augments the secretions, and promotes moreover an abundant flow of bile.

Administered at first in centigram (equals gr. 1-6) doses and repeated as often as needed, it serves not only (1) to reduce the intestinal toxicity by greater fecal evacuations, but helps also in realizing the second therapeutic indication, which is (2) to favor biliary asepsis by assuring the flow of bile and preventing infection.

4. We come now to the use of a series of medicaments such as podophyllin, quassin, caffeine, euonymin and juglandin.

It is well known that as an evacuant *podophyllin* is a cholagog, which gives the greatest quantity of bile at the same given time for the same weight of body. As the case may be, it is given either alone in doses of one to three centigrams (equals gr. 1-6 to gr. 1/2), or less when in combination with other alkaloids.

Quassin, while it is a valuable tonic of the gastric mucosa whose secretion it excites, is at the same time very useful

Phosphorus has been advocated as effective in osteomalacia. Try zinc phosphide gr. 1-67 every hour while awake.

Picrotoxin is said to be beneficial in laryngeal tuberculosis, but the rationale of its use is not easy to recognize.

also in dyspepsia from a deficiency of biliary secretion. Given in doses of two to five milligrams, (equals gr. 1-32 to gr. 1-13) it is more efficacious when associated with caffeine in doses of five to ten milligrams (equals gr. 1-13 to gr. 1-6). The last mentioned alkaloid, not its salt, arrives undissolved into the intestine and acts directly on the liver and intestines, increasing their secretions.

Euonymin, the active principle of the wahoo (*euonymus atropurpureus*) is well known as a good laxative and excellent cholagog. It is naturally associated in doses of one to five centigrams (equals gr. 1-6 to gr. 5-6) with quassin, caffeine or podophyllin, and the other purgatives spoken of.

Juglandin, the active principle of *juglans regia*, has its indication in hepatic congestion, for it is an excellent cholagog and a peristaltic excitant of the intestines. Given in a few centigrams it is useful in the same cases as the medicaments before mentioned.

It would be wrong not to mention here that other direct excitant of the biliary secretion, viz., emetin, which is called for in hepatic insufficiency to do good service.

Emetin, which is the active principle of ipecac, will have good effect when given in doses of one milligram (equals gr. 1-67) along with the purgatives and cholagog, in cases where the irritations of the liver produce fever, abdominal distention, vertigo, and even vomiting. Its action is certainly not only in increasing the flow of bile, but also as an antiphlogistic. Conjoined with caffeine and quassin it is useful in small engorgement of the liver with a hypersecretion of bile, and will be readily appreciated by all who will once make use of this medicine.

And in juxtaposition with all these alkaloids and cholagogs there are to be mentioned some other medicaments, which will assist them in reaching their aim and render considerable service. Thus it is that *valerianate of atropine*, and *hyoscyamine*, given in doses of a quarter of a milligram (equals gr. 1-200), together with *quassin* half an hour before meals, will dissipate the spasm of the biliary ducts and make the bile flow easily into the duodenum. So too will *cicutine* in milligram (equals gr. 1-67) doses act as a calmant of organic contractility, while *narceine* in some milligrams will quiet pain without suspending secretions, while *pilocarpine*, *scillitin* and *asparagin* will ease the fire of the emunctories who will come to the help of the menaced organism.

5. The third indication in order is:

The decongesting of the liver.

For this object Alkalotherapy offers very great resources for the patients and many medicinal combinations of great therapeutic value. These combinations have for their general aim to act on the entire vascular system by producing a vasoconstrictive effect on the small vessels. For this purpose the vasoconstrictive and tonic properties of strychnine (sulphate, arsenate, or hypophosphite), or of the more mild brucine, are made use of. Strychnine is the vital alkaloid *par excellence*. Its action approaches that of electricity. It is a direct tonifier of the nervous system and indirectly of the muscular fiber. It is not indifferent what salt of it we employ, whether the hypophosphite, the arsenate or the sulphate. It is well known that phosphorus agrees with people whose brain is weakened, with neuropathics, with the debilitated, psychopathics, neu-

I have relied on zinc phosphide for ten years as a remedy for herpes zoster, without a single failure to cure quickly.

Although picrotoxin strongly stimulates sweating it has been used with asserted success as a remedy for night-sweats.

rastrhenics, over-worked, convalescents, and generally with patients of adult age.

Arsenic is an antiperiodic, tonic, antiputridity and anti-waste remedy. It is suitable for paludics, chlorotics, phthisics, cachectics, "with those that make pus," and with the aged.

Sulphur is a microbicide, weak indeed when in this double form of sulphuric acid and sulphate, but it is suitable in all cases without any other indication than that of microbic fever.

Brucine is used in the practice of children, who are generally sensitive to medicines, or are too feeble for powerful ones.

With strychnine is associated *aconitine amorphous*, whose employment in alkalotherapy is as extensive as it is efficacious. Experimental and clinical studies in active remedies assigned justly to it such a high place that, as Prof. Laura of Turin says, on the whole and considering the number and series of diseases to which aconitine is applicable, it may be regarded as a sovereign remedy. Aconitine amorphous has a vital action which it exerts by the intervention of the sensitive and motor nervous centers and by the vasomotors. It is the calmant *par excellence*, and the most active regulator of the functions of the great cerebral centers and of the circulation. It commands the great sympathetic, especially the cardio-pulmonary and solar plexuses. It acts as a diuretic, diaphoretic, decongestive, appetiser, and excitant of intestinal peristalsis. Thanks to all these, aconitine comes to be a strong antithermic and wonderful antiphlogistic in all active hyperemias, in irritating fluxions, and in secondary hyperemias which accompany and render dangerous such inflammations as that of the liver.

Alongside these two alkaloids is naturally placed *digitalin amorphous*, whose physiologic action had been so long discussed, and seems to be put in its proper place at present. Its action is no doubt very complex since it acts at times on more than one organ of the circulation; but there is this very great advantage in its employment that we can make it act upon certain elements to the exclusion of others.

That which occupies us today in our investigation is the production of its effect principally on the contraction of the smooth fibers of the small blood-vessels. If the heart permit it, we can then push the remedy if necessary until we obtain its maximum effect, the augmentation of the energy of the heart's contraction and the slackening of the heart's beats.

Resuming, we can say that in the association of strychnine, aconitine amorphous and digitalin amorphous, the first alkaloid acts as an incitant of the cerebrospinal nervous system generally, and accessorially of the great sympathetic.

The second, aconitine amorphous, is a sedative, tonic, and moderator of the great sympathetic generally, which commands the vasomotors, the capillaries of the blood, and the lymphatics.

The third, digitalin amorphous, is a tonic incitant of the cardiovascular plexus, which is a special part of the great sympathetic.

After these explications of the remedies it can be well understood how much their ensemble concurs by tonifying and normalizing the three great functional centers, viz., of innervation, circulation and secretion, all three of which depending on the vitality which is the principle of the entire organism, how much these



In severe and intractable neuralgias, if no mechanical lesion is present, give zinc phosphide in full doses a week.

Picrotoxin strongly stimulates secretion of gastric and intestinal juices, saliva, bile and pancreatic juice.

will concur in equilibrating the physiologic budget of the hyperemic organ.

Hence, as the case may be, we will give half a milligram (equals gr. 1-134) each of strychnine and aconitine amorphous, together with one milligram (equals gr. 1-67) of digitalin amorphous, every three, two, or one, or half hours; in the combination of which I spoke already in a previous work, in acute cases according as the case proceeds. In chronic cases it will be enough to give at bedtime three or even four doses of the same combination. Practice has shown that the action of these remedies is more advantageously felt during the repose of the night.

6. This is as a general rule the means by which to get a decongestion of the liver. But this means is not immutable. The condition of the patient and the troubles of his various organs may at times conspire to modify the composition of the medicines, whose action and administration we minutely detailed. According as the intensity of the fever may be, according as the predominant troubles of the circulation and the kidneys may be, or those of the skin and pulmonary and intestinal mucous membranes, important changes will have to be made in the combination of the medicines with a view of getting the results aimed at. Or, the combination may be in the hands of a physician, and his precise and clear diagnosis is a pliant material, to be modeled and fashioned by him as the conditions of the patient and the disease may demand. So aconitine and digitalin may have to give place to caffeine, or to various salts of quinine, arsenate, hydrobromate, hydroferrocya-

nate and salicylate, or to cocaine and veratrine.

We can do no better than to refer to what would seem to be fixed in this respect in the admirable synthetic tableau put up by Dr. Le Grix in a special study devoted to "Dosimetric Trinities," a tableau which I shall pass before your eyes.

7. The last indication in insufficiency is to prevent the introduction of poisons into the digestive canal.

After instituting the grand line of alkaloidal medication we would yet not have guarded the patient if we forgot to regulate thoroughly his diet.

Hepatic activity shows itself above all in the utilization by the organism of alimentary substances, and in *rapport* with this we must institute a regimen which will give the least toxic or infectious material, which the intestines should send to the liver. Absolute milk diet must be observed in grave hepatic insufficiency. In weak persons the complete suppression, or the very moderate use of meat, will hinder the formation of the ultimate products of the decomposition of albumin, especially that of carbonic acid, which accumulate and produce the intoxication of the organism. We must insist upon restraining the use of hydrocarbons, which taken in abundance may produce hyperglycemia and consequently glycosuria. As to fats, and all fatty substances, they must be under surveillance, remembering that in hepatic patients the production of bile is generally an altered one.

Icterus, although it is little constant, serves as a touchstone, and when it is present makes it evident that all fatty



In many cases we believe the nutrition of the nerve centers is at fault and then zinc phosphide may win us laurels.

Picrotoxin causes profuse sweating and might replace pilocarpine when the latter's price tends to soar skywards.

matters must be excluded through all the course of treatment.

Paris, France.

—:O:—

Let us suggest that the milk diet may

often be advantageously replaced by one of buttermilk; and this in turn by the juices freshly pressed from fruits, the value of which seems to be strangely overlooked by our delicate-feeding Gallic brethren.—Ed.

TYPHOID FEVER.

By W. H. Baldwin, M. D.

President Northern Tri-State Medical Association; President Board of U. S. Examining Surgeons.



T is with some hesitancy that I approach this well-worn subject, but if I am able to make one new point or present one new theory worthy of serious consideration I shall be highly satisfied.

That this formidable disease is one of the intestinal tract is now an established fact, therefore the term typhoid fever, given when it was considered a fever *per se*, is a misnomer, and it is more properly designated enteric or intestinal fever. But as this term does not strictly describe or distinguish it from other forms of intestinal trouble which cause a rise of temperature, the old name will probably hold good.

The disease is caused by the infection of certain intestinal glands. These glands become infected through contact with certain germs, taken into the system through the medium of food, or water, or any such other method as will introduce them into the alimentary tract.

Now, why do the glands of Peyer and the solitary follicles of the intestine become infected, and not the tonsil, or the pancreas, or the testicle become the seat of the disease? Why should the germs of certain diseases select certain organs and no other? Why should mumps affect the parotid gland and malaria the spleen? Were these organs of excre-

tion the problem would be easily solved, by assuming that it was nature's effort to eliminate the germs by that route. But the germs do not select the organs in my opinion, but rather the organ selects the germ. Nature has provided the different secretive organs of the body with cells, which have the power to take from material coming into contact with them such portions of said material, which has a definite chemical arrangement, as to make up the secreta of that organ. In fact, all nature is made up of but few chemical principles, differing in arrangement of atoms and molecules, requiring only a slight difference in such arrangement to produce a great difference in the product.

The cells of the liver have power to arrange from the blood such chemical combination as to make bile; the stomach, pepsin and hydrochloric acid; and whenever any substance is propelled along the blood-stream containing the elements in definite proportions, these organs spring to their selective duties.

Now I am not aware that a chemical analysis of bacteria has ever been made, but I have no doubt that could such analysis be made it would be found that, like all other material products of nature, they have a definite chemical formula; and when the bacillus of Eberth

Given debility of the nerve centers as the indication, and zinc phosphide will very often come into play and never fail.

In giving phosphorus bear in mind the possibility of fatty liver and of necrosis of the maxillary bones.

traverses the intestinal tract, the glands of Peyer discover within it that chemical arrangement for which they are looking, to form their share of the intestinal juice. It is gathered into the gland and there by the development of poisonous ptomaines an inflammation may be set up and the condition characteristic of typhoid ensues.

The treatment at the present time seems to be fully in accord with the present antiseptic era, and there is no question but that the dread disease is more successfully treated under that than any other form of treatment. While a few years ago the disease had to run a course of from four to six weeks, now no practitioner—unless it be one who still clings to the old method—but believes he aborts his mild cases and shortens the time by half on the severe ones. How does he do it? Do the antiseptics he uses kill the germ? Personally I do not believe it possible to disinfect 25 feet of intestine, or to inhibit the growth of the innumerable multitude of germs which infect it, with any drug except to a very limited extent; that is, by reason of the germicidal properties of the drug *per se*. If the drug does not do that what does it do?

Let us look over the action of some of the antiseptic drugs.

Heading the list stands calomel. The therapeutic effect of calomel is to increase the action of the glandular system, especially the liver, salivary glands, pancreas and intestines. That salol and the sulphocarbolates have the same action there is no doubt. These drugs are split up into their component elements in the intestinal tract, and the action of carbolic acid is obtained, for by their prolonged administration or in too large

doses the characteristic appearance of the urine occurs, showing that we are getting the effect of the acid. That carbolic acid is a stimulant to the liver and pancreas is demonstrated by their congestion, which has been observed post mortem after carbolic acid poisoning. The same can be said of other remedies used, some of which are not antiseptics, as tincture iodine, eucalyptol, thymol, podophyllum and turpentine. All increase glandular secretion.

Now, having determined that the value of the remedies is due to their power to increase the natural secretions of the alimentary tract, where does the benefit come in?

Bile is in itself an antiseptic, and there being about twenty-one ounces secreted during the day, any interference with the function deprives the intestinal tract of one of its very important antiseptics. In typhoid the secretions of the liver, pancreas, spleen and intestines are checked, by reason of the loss of appetite and consequent absence of their natural stimulant, food, and their congested and swollen condition due to fever and disturbances of circulation. The intestinal antiseptics overcome this to a great extent, forcing them to act, and a greater amount of the natural antiseptic and healing constituents of the digestive tract is thrown out upon the seat of the disease. The same condition exists when we get a hemorrhage from the bowels. How many times we can date the beginning of convalescence of the typhoid patient to a profuse hemorrhage. I would have one in every case if I could bring one on and stop it when I wanted to. The pure red blood, antiseptic, containing the natural healing properties of the body, poured out over the



I have never known zinc phosphide to cause poisoning like phosphorus, but have never exceeded doses of gr. 1-6 four times daily.

The dose of phosphorus is gr. 1-134 three times a day, for one week only, doubled in rare cases and in rickets.

seat of the disease, there to remain several hours, has many times saved the life of the patient.

Of equal importance to medication is diet; such diet as will sustain the life of the patient and give the bowels as little work as possible. Milk is the best of anything I have used. Give it frequently, in small amounts, and ice cold if grateful to the patient, varying with broths without grease, and fruit juices. But our patient soon tires of these. He will tolerate milk for a week or ten days and then the mention of it nauseates. Broths wear out still sooner. When all have given out I have found that ice cream will be gratefully received by the patient longer than any other nourishment, and I have never seen any bad results; but on the contrary it does good,

is well borne, and I have thought at times modified the disease. It should be home-made, that plenty of rich cream and raw eggs be incorporated. Feed in small quantities and often, varying the flavor to suit the patient's taste.

Look to the hygiene of the surroundings, boil all water used, give plenty of fresh air for benefit of both patient and attendant, cold sponge baths to reduce temperature, codeine sulphate to relieve restlessness, with a little antipyretic of the coal-tar order to induce sweating and aid in lowering temperature, calomel and the sulphocarbolates.

Under this regime my per cent of recoveries has been 98, during eight years of practice.

Quincy, Mich.

TYPHOID FEVER.

By G. W. Peck, M. D.



HERE has been so much written about this disease, its etiology, general characteristics, treatment, and that by men renowned as investigators in medical science, that it seems presumptuous to make an effort to add anything practical or theoretical on the treatment of a disease that has so long baffled the skill of the profession; I mean in so far as the application of any specific treatment is concerned. Every qualified physician who has practised medicine for any length of time, without doubt, knows all the established facts, accepted as such, that have been deduced from the investigations of all its presentable phenomena, objective or subjective.

It would be a waste of time to enter

into a technical history of the disease—much more into an investigation of the different methods of its treatment—especially as no one method of treatment has, as yet, been accepted as specific. In my treatment of this disease, beginning with my first case, I have pursued a nearly uniform course of treatment based upon conditions and the primary cause of such conditions.

The primary cause of the conditions which exist during the course of this fever is supposed at the present time to be the bacilli discovered by Eberth in the year 1880. Entering into the alimentary canal they are conveyed into the lower bowel and become located, primarily, (this is questioned by some) in Peyer's patches, and by rapid increase



Headaches in the back and base of the brain are apt to be due to cerebral exhaustion and relieved by zinc phosphide.

The first stages of parietic dementia may be arrested by phosphorus if the patient will allow his life to be regulated.

in numbers are disseminated, producing ulceration and disintegration of tissues in various parts of the system. The toxic elements which result from this process are absorbed and drawn into the blood current, producing by their chemical action or otherwise the fever, attendant phenomena and sequels.

There are several prime factors to be considered in the treatment of every case of typhoid fever; first, the condition of elimination; second, the nidus of propagation; third, the toxins which are always present in the blood and tissues; fourth, the physiologic force of resistance.

By the proper treatment of the first three, the fourth will take care of itself provided its resistant forces are normally correlated. It is a reasonably established scientific fact that nature, in her defence against the entrance and propagation of heterogenous factors which are inimical to her normality, manufactures from such material as she may possess, peculiar substances, which while destructive to heterogenous principles and their effects may at the same time to a greater or less extent enliven and increase the activities of all the normal physiologic forces of resistance which have not become entirely inoperative. Therefore, as long as nature can draw from her storehouse the necessary material for defence, she will scarcely need any assistance. But when she has exhausted the supply from which she manufactures the arms necessary for her defence, where is the man who is wise enough to furnish the material for her necessities, or recognize the character of such material?

Well, we all hope for the solving of this problem, in that bright future to

which we are always climbing. In the meantime we of necessity must blunder a little, perhaps considerable, even when we are making the best efforts of which we are capable. It is not my present purpose to enter into a critical examination of the methods which have been or are now used in the treatment of this disease, but I will simply state the methods of treatment that I have followed with success and leave critical examinations to others.

When first called to attend a case of typhoid fever I direct the nurse to give from 4 to 8 grains of calomel, in divided doses of two grains each every hour, until the maximum quantity is given as indicated and decided upon at the first visit, and to be followed within 5 to 8 hours by a brisk saline cathartic. After the bowels have been thoroughly cleansed I give two grain doses of zinc sulphocarbolate every hour, till 6 or 8 doses are taken each day; first dose to be taken at 8 a. m. every day.

I also dissolve in 18 drams of water as follows: Fifteen granules each of aconitine gr. 1-134, digitalin gr. 1-67, strychnine arsenate gr. 1-134, quinine arsenate gr. 1-67 and atropine gr. 1-250. This should be colored to avoid mistakes.

Of this solution I give a teaspoonful every hour until 7 or 8 doses are given each day. First dose to be given at 9 a. m.

This treatment is continued until convalescence begins, when the doses are gradually reduced in number. When special indications seem to call for it I direct two-drop doses of Fowler's solution to be given in a little water 3 to 4 times a day. When the temperature runs above 102.5 I direct the arms, neck and chest to be sponged with cool water



Plethoric persons and uricemics do not need zinc phosphide and may be injured by its improper administration.

When impotence is attended by deficient secretion of semen give phosphorus and nuclein together, in fair doses.

every hour, even oftener if indicated. I direct the nurse not to give any medicine after 9 p. m., and that the patient in no case be disturbed during the night unless absolutely necessary. I never direct medicine to be given to typhoid patients after 9 p. m. unless under extreme conditions.

In my first cases of this fever I used c. p. naphthalin (Merck) and belladonna, from which without exception favorable results followed. I have lost no patients by the above methods of treatment; in no case has there been tympanites. Diarrhea has been controlled perfectly after the fourth day of treatment. Delirium has developed in only one case, which was treated in Omaha, many years ago, by naphthalin and belladonna. This case was delirious from the start. I prefer zinc sulphocarbolate to naphthalin in the treatment of this fever, yet I believe naphthalin to be the most powerful and certain in its action, but it is the most dangerous drug of the two.

I prefer the alkaloids as mentioned, not from any prejudice, but because of certainty of their action and the ease with which I can gauge doses for definite effects.

The above treatment, which I call fundamental in character, is not changed during the progress of the disease, unless it be in the strength or number of the doses given per day, and then only when indications absolutely demand a change. Most of the drugs mentioned, I believe, are to a greater or less extent antitoxic to the toxins which are present in this fever and at the same time assistants to the antitoxins produced by the resistant action of the physiologic forces. More especially would I men-

tion belladonna or atropine in this connection, the effect of which should be carefully watched and the dose increased or diminished as each individual case may require. In every case treated by the methods mentioned the temperature has become normal between the tenth and fourteenth days of treatment, and remained so and in every case the recovery has been rapid and complete.

In the treatment of typhoid fever the temptation to change from one method to another is very great, when a favorable change does not appear within the first ten days and when the temperature runs persistently above 102.5 and 103. But I would earnestly warn against any change of treatment that may be adopted, which is based upon scientific principles, clinical facts and a correct conception of the individual indications of each case. I do not mean that certain unexpected conditions which may arise should not be met by appropriate remedies; but I mean that that fundamental treatment which may be chosen to attack the salient features of the disease should not be changed during the height of its progress.

When arms are once intelligently chosen with which to fight an invading foe, they should not be changed in the heat of conflict. They should be used skillfully and without wavering. Be sure and select the best remedies known, then use them persistently with as little change as possible. That which has been previously and carefully learned and chosen as a means of defence against typhoid fever can scarcely be changed with advantage to the patient during its progress.

This is the "bull-dog" fever of the



Phosphoric acid possesses the virtues of the mineral acids and is not therapeutically related to phosphorus or phosphide.

Impotence from exhaustion, self abuse or any other excesses or overwork, may be cured by phosphorus with common sense.

human race, and its tenacity of grip can only be overcome by a persistent adherence to an unchangeable course of treatment, based upon the fundamental principles involved in each individual case.

Food and drink I have not mentioned; for the reason that scarcely will two cases be found which will require the same, either in character or quantity; and they must in each case be changed and varied to suit the individual indication, all of which of necessity must be left to the skill and judgment of the physician in charge. The food at least should be semi-liquid and adapted to the enfee-

bled digestive power which is always present in this disease.

The drink should be made very slightly acid, preferably by muriatic or lactic acid. Any physician who may be in charge of a typhoid patient should carefully avoid trying in any way, by any course of treatment, to make a sudden or marked impression upon the course of this disease, either on account of his own impatience or anxiety or that of the friends. An indulgence in such a course of treatment cannot be too strongly censured.

Dos Palos, Cal.

SPECIFIC MEDICATION.

By Andrew H. Smith, M. D.



N a large proportion of cases calling for treatment the whole duty of the physician is comprised in efforts to alleviate symptoms, without any attempt to remove the underlying cause. This course is determined by one of three conditions. First, when we do not know the cause; second, when we know the cause and know it to be irremediable; third, when we know the cause to be transient and of such a nature that it may safely be left to itself.

In any one of these conditions our role consists simply in regulating the various functions of the body, so far as may be possible or necessary in order to maintain as nearly as practicable a physiological condition, and then to relieve pain or other distressing symptoms that may arise.

This has been termed treating the patient instead of the disease, and the observing of this distinction is sometimes

claimed to indicate special sagacity in therapeutics. But there are morbid states, which evidently are but the working of a foreign agent which has obtained a lodgment in the body, which latter serves merely as the theater of its operations. The activity of this agent then constitutes the disease, and the disease will continue so long as the morbid agent remains active. Such a disease we call specific, and the disease itself, as distinguished from the patient, calls for treatment.

The treatment in such a case necessarily implies the employment of some remedial agent that has the power of antagonizing the noxious principle at work in the organism. This antagonism may be chemical or vital in its mode of action. More commonly it is the latter. The subtle relation that exists between the living cell and some forms of dead matter, though most real, defies all analysis, and our knowledge of it is, and proba-



Phosphoric acid above every other relieves thirst, in fevers, or that of the fat woman in summer with ice water too handy.

For mental debility or aberration dependent on brain exhaustion give phosphorus only if you can compel rest also.

bly always will remain, purely empirical. Why cocaine should paralyze a sensory nerve, or strychnine should tetanize a muscular fiber, we do not know, and have no means of knowing. In like manner we simply know the fact that the malarial organism cannot live in blood that contains an almost inappreciable quantity of one of the cinchona salts; but the reason for this we can scarcely conjecture. Other organisms do not show a like susceptibility to the drug in question, nor will this one as readily succumb to other drugs apparently more efficient as germicides. We can only assume that a peculiar relation, that has a biological rather than a chemical basis, exists between the parasite and the remedy, and is along the line of the reaction between cell life and drug potency already referred to.

As yet, the list of diseases for which universally accepted specifics exist is very limited, comprising certain infections and, perhaps, some other diseases not of parasitic origin.

It is to be observed that it is not claimed for a specific that its use shall be attended by success in every case. The most required is that in uncomplicated cases, and under proper conditions, a cure may be expected as a rule or, at least, that the disease may be held in check so long as the remedy is continued. Thus, it is rarely that syphilis can be so completely eradicated that the patient is secure against relapse if all treatment is definitely suspended. A pernicious chill may destroy life in spite of enormous doses of quinine. It is a common experience that the salicylates will not complete the cure of rheumatism after having controlled the early severe manifestations, and so on with regard

to other specifics. And yet no one would venture to deny that in each of these diseases the remedy exerts a directly curative influence such as no other agent is capable of producing. What practitioner ever thinks of relying in the first instance upon any other than the generally recognized specific treatment in these affections, though we may be forced in the end to accept the aid of additional remedies?

But are we always to remain satisfied with the progress thus far made in the use of specifics? Is the lofty tone justified with which we are so often reminded that we possess no specific for this or that disease, and that the favorable results supposed to have been observed from the use of this or that treatment are illusory, or, at best, depend upon differences in the severity of the disease in different seasons and different localities? It would be well to remember that of the specifics upon which all rely with confidence one is scarcely a dozen years old as yet, and another came into use within the recollection of many who are still active practitioners of medicine. Is there any reason to assume that the list is to remain always as it is? May we not rather say, in general terms, that the prospect is favorable for an increase of the number of the remedies available for use as specifics, as the result of increased knowledge of phenomena of cell life, on the one hand, and of the action of remedies on the other?

Thus far the field for specific treatment has been confined to disease in which a foreign morbid element has been introduced into the system. An exception to this is myxœdema and its kindred diseases, the difficulty in this case being the absence of something furnished

In diabetes insipidus and mellitus nothing equals phosphoric acid as a means of relieving the awful thirst.

For insomnia dependent on cerebral exhaustion and anemia give phosphorus gr. 1-134 four times a day for a week only.

by the thyroid gland, and which is necessary to a proper action of the economy. The artificial supply of thyroid gland or its extract constitutes an efficient specific treatment for the disease and its congeners.

In regard to diseases having a parasitic origin, the problem is so to act upon the specific micro-organisms as to prevent a further production of toxin. Toxin already formed and absorbed into the blood is very speedily gotten rid of. This is shown by the prompt decline of temperature when a focus of infection is done away with. It is the continuous fresh supply of toxin that does the mischief.

Now, in the discussion of this problem we very often meet with the assumption that the remedy employed must be sufficiently powerful to destroy the pathogenic organism. But this is not necessary. What we aim at is not the destruction of the germ, but inhibition of its activity, and these are very different things. So different are they that Sternberg makes separate classes of those that prevent growth, which he calls antiseptics, and those that destroy the micro-organism, which he calls germicides or disinfectants. Different strengths of solutions of the same agent may represent these two classes, and the strength of the latter class may require in some cases to exceed enormously that of the former. The mercuric chloride in a strength of 1:300,000 will prevent the development of anthrax spores, while destruction of these spores require a strength of 1:1000.

A further difference in favor of antiseptics within the body, as distinguished from that observed in the laboratory, arises from the fact that blood serum so long as it is circulating in the vessels of

a living animal acts by virtue of its vital condition as an antagonist to bacterial growth. How powerful this action may be we can only conjecture, as it ceases the moment the blood is withdrawn from the circulation. That it is considerable, however, is shown by the observation of Koch that bacterial filaments from a drop of blood in a case of anthrax soon perished in a 1:600 solution of carbolic acid, though if a similar drop of blood were placed in the nutrient broth and the same strength of carbolic acid were added the bacilli lived and grew therein.*

Another assumption which is exceedingly common is that for combating germs within the body we must look to those agents that are relied upon for use as disinfectants outside the body; and it is claimed that safety in the use of these requires such a degree of attenuation as would make them inoperative. In this connection calculations are made as to the total weight of blood in the body and the ratio that any safe quantity of an antiseptic would bear to it.

But this reckoning involves two fallacies. In the first place, not one of the recognized specifics would be employed outside the body for its disinfectant properties, and, in the second place, quantities of the appropriate agent, amply sufficient for the purpose, are constantly being given as specifics with entire safety. It is to be remembered that attenuation of an antigermic solution is compensated for by longer exposure of the germ to its action, and that the conditions under which specific remedies are employed usually favor this prolonged exposure. As already said, the relation between the specific disease and the specific remedy is rather a vital than a

* Wigglesworth, *Lancet*, October 28, 1897.

Phosphoric acid has been recommended in scrofula, but possesses simply the virtues of all the mineral acids, no more.

For brain exhaustion and the consequent irritability, give phosphorus gr. 1-134 four times daily for a week only.

chemical one, and is only remotely suggestive of open wound disinfection, which is almost necessarily chemical in its nature. These arguments are brought forward to show that the case for specific medication outside the few diseases for which it is universally admitted to be indicated is not so hopeless as it is commonly held to be. If dogmatic negation would yield to open-minded weighing of evidence; if hopeful leads would be carefully and persistently followed up; if the bacteriologist and the clinician would join hands in a quest for antagonists to disease, specific medication would perhaps add many new triumphs to match the sombre achievements of pathology.

To illustrate my meaning, let me quote from a recent communication paraphrased in part from the article which it criticised.**

Speaking of pneumonia, the writer says: "This diversity in the death rate has given rise to false conclusions as to the result of various plans of treatment. Aside from such errors, conclusions equally false have been drawn from reasoning by analogy. In a recent authoritative publication it has been assumed that full doses of mercurials and other germicides may favorably influence the course of the attack by rendering the exudate an unfavorable culture medium for the pneumococcus."

Now, this reasoning is not based on analogy. It is based on plainly-stated facts, which the critic simply ignores. Further on he says: "We only know four infectious diseases in which we are able to meet the casual indication. Malaria we can control by quinine alone; syphilis only by mercury and the iodides;

rheumatic fever only by the salicylates or analogous substances; diphtheria only by its antitoxin. It would be a remarkable fact if croupous pneumonia—a disease due to a specific microorganism—should yield to a treatment by a number of different drugs selected to meet the cause." . . . "Nor does it seem desirable to repeat the futile experiments already made in regard to pulmonary tuberculosis, scarlet fever and other acute infections."

Why our critic should insist that there cannot be more than one specific for each disease it is difficult to see. And it is conspicuously untrue in the case of malarial fever, which may be successfully treated with arsenic, salicin, carbolic acid, ammonium picrate, and perhaps some other remedies. However the fact may be, to say that there is no specific for pneumonia, because so many different agents will inhibit the germ upon which it depends, is to argue that a thing cannot be done because there are so many ways of doing it. Our critic continues: "The effect of indifferent antiseptics and germicides upon parasitic microorganisms must bear a definite relation to the mass of the blood in which they are diluted, which may be roughly estimated at twelve to fourteen pints in the adult." But what definite relation does half a drachm of quinine, or of potassium iodide, or two or three drachms of a salicylate, or a dose of antitoxin bear to twelve or fourteen pints of blood? Who asks such a question in the presence of a case of malarial fever, of syphilis, of acute rheumatism, or of diphtheria? If the use of these specifics had had to wait until a definite relation between their dosage and the total quantity of the blood had been established,

** *Philadelphia Medical Journal*, November 2, 1901.

Phosphoric acid is alleged to check the growth of bony tumors, but this is rather to be expected from phosphorus.

In treating many neuroses it is well to give a knockout blow at once, when a cautious medication would fail.

how much should we have profited by them up to the present time!

Our critic proceeds with quotations to fortify his paralyzing arguments:

"In the long run the expectant method of treatment, which interferes only as occasion requires, is followed by a far lower mortality than misplaced attempts to jugulate the disease." "Pneumonia is a self-limited disease, which can neither be aborted nor cut short by any known means at our command." "There is no specific treatment for pneumonia. The young practitioner may bear in mind that patients' are more often damaged than helped by the promiscuous drugging which is still only too prevalent." "The less the physician interferes with the normal course of pneumonia, the greater the probability of a favorable termination."

Our critic omits all mention of the numerous reports of cases treated with sodium salicylate, to which reference will be made hereafter, although many of them were discussed in the article to which he alludes.

He also ignores the fact plainly stated in the same article, that the treatment in question substitutes lysis for crisis as the habitual mode of defervescence, the lysis, when the treatment is begun early, occurring in advance of the usual time of crisis.

Such testimony cannot be dismissed with a wave of the hand by however august an authority. Nevertheless, pronouncements of this kind are certainly not in the line of progress, and I am glad to note the following reluctant concessions: "Notwithstanding these objections, it must be conceded that thoughtful researches in the direction of specifics are justifiable."

How "justifiable" on purely theoretical grounds, not only in regard to pneumonia, but also in regard to other specific diseases depending upon a micro organism, we have already considered briefly. But it will be interesting to examine, in a very few words, the special *a priori* reasons for regarding pneumonia as a promising field for specific treatment, and how far they accord with the pessimistic attitude which these writers assume.

In this disease we start with a micro-organism less hardy than any other we are acquainted with. Indeed, its resistance is so feeble that it is with great difficulty that it can be cultivated in the laboratory. It should, therefore, be peculiarly susceptible to anti-microbic influences. Next, the exudate which supplies the medium in which it grows is separated directly from the blood, and must contain its full proportion of any substance in solution in the blood. Third, the lung transmits, through its lesser circulation, all the blood that passes through the vastly greater systematic circulation, thus bringing a concentrated influence to bear upon the microorganism in the pulmonary alveolus, as compared with the influence exerted in any other portion of the body.

Thus, we have conditions very favorable for acting directly upon the germ, so that, theoretically, the aspect of the case is encouraging. And from the clinical side, accumulating experience, as already stated, seems, in a considerable measure, to support the theoretical deductions.

Quite a number of drugs appear to act more or less specifically in pneumonia, but the one which seems to have accomplished the most thus far is the salicylate of sodium.

So far as I know, the first to report



In rickets phosphorus has proved of undoubted utility, and zinc phosphide may equal it; but not phosphoric acid.

To break up severe and inveterate neuralgias strike hard at first. Give phosphorus gr. 1-134 three times daily.

upon this as a remedy in pneumonia was Liegel in 1898. He treated seventy-two cases occurring in miners, many of the cases being very severe and in very unfavorable conditions. There was not a single death, while under the symptomatic treatment alone the mortality had been very great. Ferguson treated 105 cases with six deaths, Sebring collected 125 cases with two deaths. Smaller groups of cases equally favorable to the treatment have been reported by numerous observers.

Now, when we consider that the usual mortality from pneumonia is from 15 per cent in private practice to 25 to 30 per cent in hospitals, it is begging the question to say that because in these series so many recovered, therefore the type of the disease in all must have been very mild, or that the diagnosis in the great bulk of them was faulty.

As to mildness of the disease, Sebring says:*** "It is not apropos to say that these results came from the nature of the cases, or the mildness of a benign epidemic, for it was not so. The cases were almost without exception severe ones, and some of them extremely desperate. In the same localities, with the same surroundings, and with the regular forms of treatment, my medical brethren had many deaths. I had seen before and have seen since a fair amount of pneumonia, and that series of cases was of more than average severity. More than twenty-five of these cases were in patients over sixty-five years of age. Four of them were over eighty, and one was a man eighty-four years of age and an habitual drunkard."

So much for the sodium salicylate. The carbonate of creosote, also, is received

*** *Medical Record*, April 22, 1899.

with a good deal of favor as controlling the action of the pneumococcus, and I have found it nearly as efficient as the salicylate of sodium.

It can be given in quantities of two or three drachms or more a day without the slightest inconvenience, and continued until all disposition to rise of temperature has passed. It will usually bring about a lysis commencing twenty-four hours after the administration is begun. It is not disturbing to the stomach, and is to be preferred when that organ seems inclined to be irritable.

I should select it also in cases of considerable depression, when the sweating caused by the salicylate would be objectionable.

Going back as far as November, 1899, in an article on pneumonia in the *Medical News*, after citing a number of writers and my own experience, I recommended that family physicians keep their families supplied with carbonate of creosote or with a salicylate, preferably the former, so that, in case of indications of pneumonia, such as a chill with pain in the chest, the drug may be begun at once, and possibly the development of an attack prevented.

At the Presbyterian Hospital in this city, there have been, at the time of writing, thirty-one cases of croupous pneumonia treated since December 14, a period of forty-seven days. Of these twenty recovered and eleven died. Of the latter, five were moribund on admission, one had carcinoma of the liver, one had chronic bronchitis and emphysema, one had stricture (malignant) of the œsophagus, and one died of endocarditis. There were, thus, only two cases in which any expectation of recovery was possible when they entered the hospital.



Of the dilute officinal phosphoric acid the average dose is a dram three times a day in a glass of water, sipped at intervals.

Phosphorus may cause fatty degeneration of the liver if given in too large doses or too long continued.

Of the thirty-one cases, twenty-eight were treated with carbonate of creosote, ten grains being given every two hours. Three received none of the medicine; of these two recovered, and one died three hours after admission.

Of those treated with the carbonate of creosote, eighteen recovered. In thirteen of these the defervescence was by lysis; in five by crisis. This proportion contrasts strongly with the usual termination of the fever, which is, as stated by Osler in his definition of pneumonia, "abruptly by crisis."

In this series we have twenty cases, excluding those already moribund and those complicated with conditions necessarily fatal in the presence of any severe acute disease. Of those twenty cases, two were fatal, a mortality of 10 per cent, chargeable to pneumonia. As to the severity of those cases recovering, one had a temperature of 106.2, one of 106, two of 105.6, three of 105.4, two of 105.2, and one of 105, thus ten of the eighteen ranging between 105 and 106. The average time between the invasion of the disease and the beginning of the treatment was three and one-eighth days for those who recovered and four and one-sixth days for those who died.

In March last a paper was published in the *Medical Record* entitled, "Creosote in Pneumonia: A Resume," by I. L. Van Zandt, of Fort Worth, Texas, from which I quote some of his own experiences and some of his citations from European observers:

"In June, 1898, I read a paper on this subject before the North Texas Medical Association. This was received by some with incredulity, they citing the fact that 'all authorities' (whatever that may mean) said that pneumonia was a self-

limited disease, and must run its course. Others were willing to make a trial on my report, reinforced by that of several gentlemen present, who had adopted the treatment at my suggestion.

"Quite a number of those present and others who read the published paper, have reported satisfactory results.

"During all this time I have had cases in which the fever was gone in from twenty-four to forty-eight hours, and I am now somewhat disappointed if my patient is not ready for dismissal by the third or fourth day. In cases which persist longer there is generally an amelioration of symptoms, and the coming of an appetite, to which I was formerly a stranger in pneumonic cases. There is generally a gradual decline in the fever, with only slight moisture of the skin, a critical sweat being rare.

"Another thing I, as well as others, have found, is that if the medicine is discontinued as soon as the fever has ceased, there will likely be a recurrence of all the symptoms. Hence I continue the medicine at longer intervals for two or three days after subsidence of the fever.

"At the Pediatric Congress held in Marseilles in 1898, Dr. Cassoute, physician-in-chief to the Marseilles hospitals, gave a brief preliminary notice of his new method for the treatment of pulmonary affections. The method consists in the continuous administration of fairly large doses of creosote carbonate. In most cases a typical fall of temperature occurred during the first twenty-four hours of treatment and if the creosote carbonate were continued for a sufficiently long period of time, the apyrexia will be a permanent one. The temperature curve rose again, however, when the drug was



Phosphorus is a powerful stimulant to the vital functions throughout the body, and useful to arouse vital resistance.

Pilocarpine is the most powerful stimulant known of the mammary gland, restoring the secretion of milk when lost.

discontinued, before the auscultatory signs had disappeared. Relapses and sequelæ, so frequently seen under other methods, were entirely absent.

"Dr. Charles F. Stokes, United States Navy, in the *Brooklyn Medical Journal*, August, 1900, says: 'I have employed it in several cases with excellent results. Early treatment offers most satisfactory results.'

"Dr. J. W. Frieser, of Vienna, in the *Arztliche Central-Zeitung*, says: 'The treatment of acute inflammatory affections of the respiratory passages with the drug has yielded entirely satisfactory and even brilliant results in my hands. Both clinician and practical physicians are fully aware that we formerly possessed no remedy that was even half-way satisfactory in its action upon pneumonic disease posseses. Our entire therapeutic armamentarium was symptomatic and expectant in its nature. But it is an unmistakable advance if experience teaches us the employment of a remedy which has an influence on the disease process itself, and possibly upon the specific organisms that cause it. The favorable effects of creosote carbonate upon the various forms of pneumonia have been noticed by others as well as by me; and they are undoubtedly due to antiseptic and antibacterial action of creosote, which, in the form of the carbonate, can be introduced into the body in sufficient quantity and in innocuous shape. Besides this, it has a favorable influence on the heart and the patient's general condition; it causes, as I have often noticed, a rapid fall of temperature and retrogression of the local symptoms. The gastrointestinal canal is in no way injured by its use. In some cases the inflammatory processes in the lungs got well with such extreme

rapidity that the method might be called an abortive treatment. The temperature rapidly sank to normal, the general condition noticeably improved, the tongue cleaned and became moist, and the appetite returned.'

"Dr. Wilhelm Meitner, in the *Medicinisch-chirurgisches Centralblatt*, June 22, 1900, says: 'The most important effect of the creosote treatment is the surprising fall of temperature a few hours after its administration is begun; it becomes normal in two days or sooner. With this the general condition improves, the pulse becomes better, the breathing becomes quieter, the cough is lessened, thirst ceases, and the dryness of the mouth and lips disappears.'

"Dr M. Eberson, in the *Arztliche Central-Zeitung*, July 7, 1900, says: 'Two things may therefore be claimed for the creosote treatment. In the first place, it cuts short the disease in a most remarkable manner. In the next, and more important, it causes complete resolution of the disease focus, so that the sequelæ, more especially after catarrhal pneumonia, will not be as important in the future as they have been regarded in the past. Nor does it seem to me to be unimportant, considering the bacillary origin of pneumonia, that the sputum and excreta are voided disinfected, so that the contagiousness is reduced to a minimum. It is incontestable that the creosote treatment of pneumonia is a very important advance in practical medicine.'

"Now, with this array of testimony reinforcing my own observations for the last seven years, I trust that the members of this association will not consider me over sanguine when I express the opinion that the use of creosote or carbonate of creosote in the treatment of acute pul-

Pilocarpine never fails to control sthenic erysipelas, when given to produce and sustain slight sweating till well.

One of the most effective methods of breaking up a cold is the administration of a full dose of pilocarpine.

monary inflammations is one of the greatest life-saving discoveries of the century just ended."

Among many other commendatory notices of this drug for use in pneumonia is one by Professor Leonard Weber in the *Medical Record* of November 2, 1901. Within a short time he had treated nine cases with it, with one death.

Since the above was written, Professor W. H. Thomson has published in the *Medical Record* of February 1 the details of eighteen cases treated with creosote carbonate, with one death. He notes what I have remarked above, that the defervescence in these cases, as in the use of sodium salicylate, is much more frequently by lysis than by crisis, the proportion in his series being as twelve to five.

Among the diseases for which it would be most desirable to possess a specific is influenza. Not only is the disease in itself dangerous to life, but, with the single exception of tuberculosis, it probably entails more invalidism than any other with which the community is afflicted. It affects a vast number of persons, and a large proportion of these do not fully recover their health until months or years have passed. How constantly do we hear the complaint, "I have not been well since I had the gripe."

This persistent derangement of health is very suggestive of continued infection with the specific organism, much as is the case in chronic malaria, though it is doubtful if the germ could be demonstrated in the tissues after it has disappeared from the mucous surfaces.

In the treatment of influenza, the relief that is obtained at first from the coal-tar preparations is not continued during the latter stages, and we are left

to do the best we can with general hygienic measures, tonics, etc. And yet something might be found, perhaps in the most unexpected quarter, which would search out and remove the morbid element in the case. The condition being a somewhat chronic one, the treatment might require to be protracted, but if the almost interminable sequelæ so often observed could be overcome as the result, it would be of inestimable value.

Dr. S. Henry Dessau of this city, as also Dr. Arthur Wigglesworth of Liverpool, seem to have made no small progress toward realizing this desideratum. The former published a paper in the *Medical Record* of September 12, 1896, and another in *The Therapeutic Monthly* in May, 1901, in which he gave the strongest evidence of the great value of large doses of carbolic acid in the treatment of influenza. The latter, in *Lancet* of April 3, 1899, recommends it with equal emphasis. Both insist upon the safety of the drug even in very large doses.

Another disease which offers a tempting opportunity for specific treatment is scarlet fever. We have had within the last four or five years two or three communications in the *London Lancet* from Dr. Arthur Wigglesworth, the writer already mentioned, in which he has described, in this disease, also, very remarkable results from exhibiting large doses of carbolic acid. The treatment amounts to making this dread disease one of extremely slight mortality, while it prevents in great degree its spread by infection.

He presses the remedy designedly to the point of causing carboloria, and maintains this condition until the fever has fully abated. So far from this prov-

The control exerted over sthenic erysipelas by pilocarpine is the most absolute drug action I have ever witnessed.

In dry forms of bronchitis and other catarrhs, pilocarpine given cautiously to effect loosens the secretion.

ing injurious to the kidneys, he has had only three cases of renal implication in all his experience, and his cases, in other respects, have been exceedingly mild. Moreover, the infection communicated by these carbolized patients is extraordinarily light, but yet sufficient to confer permanent immunity, and he urges that it is better to let children take the disease in this modified form, rather than leave them to the chance of contracting it later in its normal virulence. When this is refused, however, light carbolization of those exposed gives immunity for the time being.

He has also followed this plan for twenty years almost without a failure, in a practice in which he has attended over 3,000 births, and he informs me, in a private communication, that he has never had a single mishap from the carbolic acid. That this practice has not been followed up by practitioners, is another illustration of the indifference or timidity of the profession, perhaps from discouraging teaching by admitted authorities.

In support of the innocuousness of pure carbolic acid, I have several observations of my own, made four years ago. Dr. Wigglesworth gave to children from one to six grains, according to age, every two hours, freely diluted with water. I gave to adults rapidly increasing doses until the largest amount in twenty-four hours was respectively 154 grains in one case, 112 in one, 108 in one, 72 in one, 60 in six, and 57 in one, while five cases received from $4\frac{1}{2}$ to 40 grains. Not one of these showed any ill effects. Two who had albuminuria previously were not made worse. One with general sepsis died on the eighth day after the administration of the acid was begun. I was encouraged to persevere in this in-

stance by the ultimate rescue of a patient with malignant pustule, reported in the *Lancet* just at that time, in which much larger doses had been given than any I had ventured upon.

It will be remembered that Declat gave very large doses hypodermatically in the treatment of intermittent fever, and that he insisted, as the result of a large experience, that with a pure acid no danger whatever was incurred.

The discoloration of the urine was formerly considered to be due to disintegration of red corpuscles and to require an immediate suspension of the drug. It is now known that this is not the case, and that the remedy can be pushed far beyond this point with safety. This is also true of creosote, and it seems quite possible that the usefulness of these two agents as internal antiseptics, or, if you please, as specifics, may be greatly enlarged by the recognition of this fact.

The damage inflicted by the gonococcus when it has penetrated into the deeper structures of the body calls earnestly for a treatment that shall do more than to leave the infection to itself, while wrestling with a so-called inflammation. We are told that a solution of mercuric chloride, 1 to 20,000, applied for a few minutes, at intervals during the day, is an effective strength for irrigation in the acute stage of "urethritis." This being true, might not a perpetual irrigation through the medium of the blood be effective, after the coccus has worked its way into the deeper tissues, and this without employing an unsafe quantity of the drug? Before the days of antitoxin, our distinguished colleague, Dr. Jacobi, advocated a treatment for diphtheria with this agent, administered by the stomach, in the belief that it would search out and



In sthenic erysipelas give pilocarpine gr. 1-33 every five minutes till slight sweating occurs and keep this up till cured.

A full dose of pilocarpine enough to cause sweating, promptly relieves asthma and cuts short the whooping-cough.

inhibit the bacillus, and he was able to adduce clinical facts in support of his view. Would it not be well carefully and patiently to test such a method, in pelvic or articular gonocosis, employing this or some other alternative drug?

More and more we are losing faith in the chemical theory of gout and rheumatism and incline to the belief that these allied diseases are produced by some infective principle. In the case of rheumatism this belief derives strong confirmation from the therapeutic side. Only less confirmation is afforded by the effect of colchicum in gout. In neither of these diseases has a specific organism been demonstrated. But this may be due to the lack of a suitable culture medium to represent the special tissues in which the poison in either case develops its activity. As the pneumococcus will not thrive in the secretion of a mucous membrane, but will thrive in that of pavement epithelium, so there may be a microorganism that finds its proper habitat in the synovial tissues about the joints, but will not grow in any of the media now in use in the laboratory.

This reasoning applies with equal force to other infectious diseases for which a germ has not been found. Indeed, there is a growing tendency to refer all this class of diseases to microbic origin. A further development of the magnifying

power of the microscope may have to precede the solution of this problem, just as the bringing out of the one-twelfth immersion lens was a necessary preliminary to our present bacteriology.

But in the meantime a survey of the field seems to suggest that all the known pathogenic bacteria should be studied, not so much to learn how to grow them, as to learn how to inhibit their growth. And in the quest for inhibiting agents each germ might be interrogated with a list of articles, perhaps not thought of now as germicides, since no one can tell what unexpected results might not be attained by purely empirical methods.

While the bacteriologist is at work in his laboratory, the clinician, on his side, has a field for action. Carefully conducted experiments will show that the present dosage of remedies may be safely exceeded in some cases, or that objectionable effects may be avoided by combinations of remedies which yet will leave the specific action intact.

The entire range of infectious diseases, as well as those of which myxœdema is the type, invites us to this kind of investigation; and to urge its importance and stimulate hopefulness as to an ultimate substantial degree of success is the object of this paper.

New York.

HOW WE CURE MEMBRANOUS CROUP.

By Floyd Clendenen, M. D.

Early one morning more than twenty years ago, a poor woman came to our house saying: "Doctor, won't you go to my house and see my little boy who is dying with membranous croup"? Dr.

B. had been there and said it was useless to give the child medicine, as he would soon die, and left without giving anything.

Sure enough, when we arrived at the

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Do not expect any good from pilocarpine in erysipelas when the eruption is pale, heart weak, little or no fever, patient depressed.

In disease of the kidneys and in fevers small doses of pilocarpine relieve thirst and contribute to the comfort.

house we saw the conditions just as she had stated. We thought, and looked, and asked ourselves, shall we give the old treatment that has failed in many thousands of cases and it will fail in this one? We are not a believer in following on old though well or badly beaten trails that lead only to destructive failure. We say, cut loose from all such and have self-reliance. You can, at most, do no worse than fail, and yet you may succeed.

Well, we opened our case and looked: Jaborandi will open the sweat glands, thereby reducing dryness; and gelseminine will relax and relieve the hard breathing. We gave 40 drops of a good fluid extract of jaborandi with 5 drops of fluid extract of gelsemium, to a three-year-old child. Heroic dose? Yes; we were forcing death and must be victorious. That was what we were there for, and we must do something quickly. We remembered having given a lady 20 drops fl. ext. gelsemium when all else had failed, in a case of cramps in cholera-morbus, and it relieved her within ten minutes, and we cured her too with gelsemium. We reasoned that all the medicine would not be readily absorbed in the case of the child, and we must do something quickly. We watched the effect closely and within 20 minutes the child breathed freer. We repeated with half the dose in thirty minutes, and saw the little sufferer improve decidedly. We mixed more of the remedies in water and ordered it given each half hour, and went to breakfast. Returned in an hour to meet the mother at the door, saying: "God bless you, Doctor, you have saved my child." The membrane came away and the child played that afternoon.

Well, it never rains but it pours, and within a week we were called across the Illinois river to see a case of membranous croup, that the doctor, after an all-night labor, had given up and left. We thought of the other little one and gave the jaborandi and gelsemium, perhaps in smaller doses, with complete success.

The next November we had an epidemic of diphtheria in our city. Late one afternoon we were called to see three children in one house who had malignant diphtheria. A girl 12 years old was smothering and we thought she could not live an hour. We gave the other two children medicine and then turned to the girl. We said to ourselves, this is cowardly not to try to relieve this child a little, but what could we do? Try jaborandi, etc., came to us like a flash. We gave a teaspoonful of this remedy, with ten drops of Merrell's gelsemium, then watched the girl a half hour and gave half the former dose. Placed an outward application on her throat, left more of the remedy in water, with orders to give it each hour till she slept.

We went early the next morning expecting to find the girl dead, but to our surprise she was at the table drinking coffee. The membrane was gone. She got well.

We have found jaborandi nearly a specific in diphtheria, as well as in membranous croup.

La Salle, Ill.

—:O:—

Some day Dr. Clendenen will give jaborandi for croup, and instead of his patient recovering death will ensue. And then Dr. Clendenen will wish he had stuck to certainties and used pilocarpine.

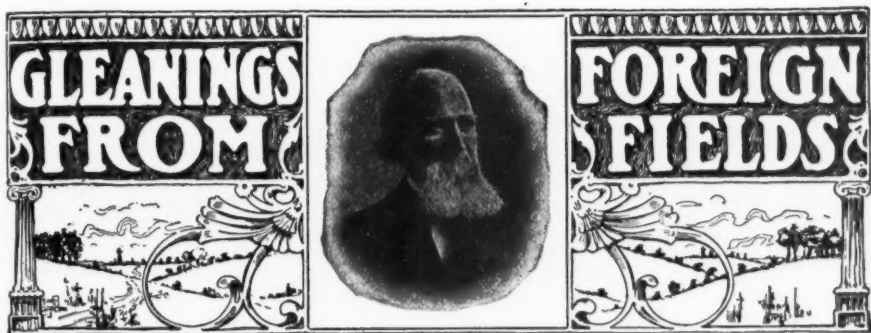
—Ed.



In asthenic erysipelas give the tincture of the chloride of iron in teaspoonful doses every four hours and feed well.

Labyrinthine deafness, especially when due to syphilis, is relieved by pilocarpine, given in full doses and continued.





Translated by E. M. Epstein, M. D.

### QUASSIN.

ACTION, INDICATION AND UTILITY IN TYMPANITES.

(From *Rev. Therap. des Alcaloides*, A. Houde, Paris.) Translated and abbreviated for THE ALKALOIDAL CLINIC by Dr. Epstein.

The amount of gas in the intestines favoring digestion exceeds not infrequently the normal, and becomes then that uncomfortable and painful affection called Tympanites. The affection may be that of the stomach, of the ileum, of the colon, of the peritoneum, or of the cesophagus.

Stomachal tympanites may have for its cause strong moral emotions, sadness, and nervous affections. Lack of exercise and sedentary occupations favor stomachal exhalations. Sleeping immediately after meals is another cause, and there are persons who belch up without any necessity the winds contained in the stomachal pouch. Constitutional debility, abuse of stimulants, gastric affections, and errors of diet during convalescence from sickness, all these favor the development of stomachal tympanites, and are the distant causes of it. The proximal causes are direct introduction of air with

the morsels of food swallowed; and aside from this, it is said that a suppression of an issue, or an exanthema, or of a hemorrhage may be a direct cause of stomach tympanites. Certain vegetables, too, have the property of developing gases, as, for instance, beans, lentils, crude fruits, etc.

The affection is characterized by the emission of gas by the mouth with or without noise. Some persons belch with such a strong noise that it becomes disagreeable to those near them. At times the emission of gas is made without any noise, but with a great deal of difficulty, which results in divers accidents: The body becomes horribly contorted, and for a time there is a suspension of all eating and drinking; the eyes become bulging and brilliant; the distention of the abdomen persists. At times there is epigastric pain. Cough, hiccough, and vertigo are quite frequent. The form of the abdo-

men is irregular. There is never emission of gas per anum. In stomachal tympanites the gases may or may not be odorous. The tumefaction of the epigastrium may often deceive one to think of obesity or dropsy. There are no borborygmi or movements in the abdomen. Applying the ear to the epigastrium you will hear something resembling the rippling of a brook.

There is pallor of the face, increase of cough, dyspnea, palpitation, later on attack of despondency, irregular pulse, and cold sweats. Dyspnea, cough and hiccough are increased on pressure of the epigastrium. Percussion there gives the sound of a cracked drum. In females pressure on the epigastrium expels urine, and fecal matter if there is diarrhea present. Various troubles may occur when the patient is unable to belch, and he may even succumb in an attack of stomachal tympanites, which is fortunately very rare. The trouble may be little serious at the outset, but may become very much so when spasm of the œsophagus supervenes.

Stomachal tympanites is distinguished from other affections by the following characteristics: Stomach pain, absence of rattling sounds, belching of gas, rippling murmur on auscultation, absence of fluctuation, and rolling of the abdomen from one side to another (*dejettement*), more or less resonance on percussing the epigastrium, absence of infiltration, rapid disappearance of digital impression made on the abdominal parietes.

The treatment of stomachal tympanites must vary according to cause and form of the affection, and consists of rational therapeutics and hygienic remedies based

on the symptomatology of this incommoding affection.

Diffusibles, antispasmodics, ethereal preparations, rhubarb, with hyoscyamus, can be used. Tepid baths will be useful. The patient will have to be careful of his diet and use articles of easy digestion and only hygienic drinks. With these precautions the use of quassin will produce immediate amelioration and a complete cure will not be long in coming.

In atonic dyspepsia, in vertigo from gastric disease, in general debility, quassin acts by stimulating the appetite, rousing the digestive functions of the stomach by acting at the same time on the gastric secretions and on the muscular fibers of the organ, and thus rousing its tonicity. This action of quassin on the muscular fibers makes it a successful remedy in nervous vomiting. It restores the normal peristaltic tonicity to the contractibility of the stomach, of which vomiting is the reverse. In vomiting due to some gastric lesion quassin acts also favorably, but in such cases it will be useful to add to it either cocaine alone, if pain is to be calmed, or pepsin and pancreatin, according as the perturbation which happens to compromise the digestion is to be combated.

Quassin is indicated in most diseases in which there is more or less loss of appetite, and in those which are consecutive upon a defective alimentation. Thus it will be useful in the various forms of anemia and chloroanemia, not, however, as a direct or curative agent, but because it stimulates the appetite and aids digestion. In certain cases the concomitant administration of caffeine taken after meals in the form of *Vin de Cafeine Houde*, would assist the action of quassin.

Pilocarpine in full doses should be generally used to break up febrile attacks, specific, and simple inflammations.

Pilocarpine has been warmly advocated as a remedy in the treatment of syphilis, and not simply as an eliminant.

Quassin, determining as it does the ingestion of a greater quantity of aliments, may in the first few days of the treatment produce a greater feeling of illness, heaviness, and fatigue of the lower extremities, sensations which such patients are apt to feel after meals, and this for the reason that quassin made the exsanguinated organism to apply all what it has left of vitality to the functions of the stomach. With the aid of a little *vin de cafeine* these functions will be accomplished without fatigue, without somnolence, and the amelioration will be so much the more rapid.

Quassin does not act directly on the assimilation, and does not participate in this any more than, as stimulating the appetite and the digestion, these augment the quantity of food taken, and the nutrition gains also by a better quality of the act of absorption. This act is of great importance, although quassin is not a new element in the assimilation.

The immediate effect following the administration of quassin is an increase of the salivary secretions, and this hypersecretion conserves, nevertheless, its normal composition. This effect is followed very soon by an imperious demand for food, which it will be best to satisfy if one wishes to avoid the sensation of pain, which manifests itself on the part of the stomach by acrid regurgitations, and even by a feeling of fainting if the demand is not quickly satisfied.

At the very first days of the use of quassin we can meet already with a very noticeable increase of the appetite, and this is followed soon by a marked rise of strength, in consequence of a more copious alimentation and a more complete digestion of what is ingested.

In the convalescence from febrile dis-

eases, after the intestines were cleared of the septic products they contained, or in the embarrassment of a gastric fever, also after clearing the intestines with an aqueous purgative, or in any difficulty of protracted convalescence, quassin will accelerate recovery, always because of its action on the appetite and digestion. In all these cases alike quassin will be aided in its effect by caffeine to make it more rapid and complete.

On the evacuations, quassin acts in a remarkably double manner. In constipated individuals it renders the feces easy, semi-soft and formed, and in those who suffer from diarrhea consequent upon a bad digestion it stops the diarrhea as it does the constipation, by arousing muscular contraction of the intestines and increasing their secretions. Quassin is, therefore, a regulator of intestinal functions in the same way as sparteine is a heart-regulator, causing it to beat very short or very rapid, so as to restore its normal rhythm.

Quassin is not a remedy during the febrile state, and we have to wait for this to pass off before we commence with its administration.

There are also other cases in which quassin renders good service, upon which we cannot enter at large in this paper. These are hepatic and nephritic colics, cystitis of the neck of the bladder, and nephritis. Mention must also be made of the ability of quassin in maintaining or increasing the secretion of milk. This action may be a result of the better nutrition it effects, or it may have a direct influence on the mammary gland.

The granule form is the preferable one on account of the intense bitterness of the substance which in liquids or in syr-



Pilocarpine is believed to possess a remarkable control over all diseases resulting from invasions of micrococci.

The membrane of diphtheria and that of croup sometimes loosen under the potent influence of pilocarpine; full doses, please.

up too is intolerable. But the pills should never be silvered, as this would hinder solution. The little bitterness which may remain in the mouth after taking the quassin in granules is not to be regretted, as this will help to increase the salivary secretions.

In addition to the above I quote from Kionka in Liebreich's *Encykl. d. Therap.*, Bd. III, pp. 455-6.

"The active constituent of the (quassia) wood is the bitter stuff called quassin, which is in it in 1-10 of 1 per cent. Quassin is, however, a mixture of various substances. Massuta produced a number of bitter stuffs from the two kinds of quassin woods (Surinam quassia amara L., and Jamaica Picraena Excelsa, Lindt. A. exc. SW.), of which he called quassiane what he derived from Quassin, and picramine, what he obtained from the Picraena. From both of these he obtained by means of HCl. bibasic acids, viz. quassin acid and pikraenine acid, which crystallize in monoclinic prisms. Along with the bitter stuff there is also in the wood a resinous substance as well as traces of an ethereal oil. Coloring matter there is none."

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*Soxhlet's Nachrzucker*, which, if it should find its way among English-speaking peoples, should be called "*Sugarfood*," and not left untranslated after the manner of "*Kindergarten*," "*Rinderpest*," "*Hinterland*," and the like.

The preference of this new preparation of milk for artificial feeding of infants is based on the fact that it contains dextrin and maltose in equal proportion. Soxhlet has proved it conclusively that the diarrhetic stools incident

to artificial feeding do not appear the poorer the artificial food is in maltose and the richer it is in dextrin. (Hence the name). S. adds also an acid to his preparation to take the place of the stomach acid which is necessary for the binding of the lime salts. Sodium chloride acts in the same way, and renders besides the casein more easily digestible.

Soxhlet's Sugarfood is a white, sparingly hygroscopic powder, which easily dissolves in water and makes a yellowish, slightly opalescent solution. The odor is that of malt and the taste sweet. Dr. Frucht, who reports his experiments with this preparation on healthy and sick infants, and who gave it in 2-3 of a liter (about 10.6 ounces) daily, found the infants doing well, except for an inclination to obstipation. The preparation is readily taken and the diseased intestine quickly recovers under its use. It is cheap and can be readily prepared at home.

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#### MEDICATION IN TUBERCULOSIS.

Dr. Leo Silberstein, practising physician and medical director of the sanitarium for throat and chest patients at Blankenhain, defends the point of view that medicinal agents can, in the modern treatment of phthisis, not be dispensed with. Pneumin and Pulmoform served him best of all creosote preparations, as creosote did of all the numerous remedies recommended for the treatment of tuberculosis. Both of these preparations (which I will describe below) Dr. L. S. used in twenty cases of pulmonary laryngeal and intestinal tuberculosis, fifteen of which were ambulatory and five house

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It has even been claimed that pilocarpine exerts an inhibiting influence over the action of the tubercle bacillus.

In the treatment of that grisly monster diphtheria, the powerful influence of pilocarpine may be invoked in need.

patients which were closely observed. From these cases the doctor draws the following conclusions:

(1.) Pneumin and Pulmoform are perfectly non-toxic, and inasmuch as they do not cauterize the mucosæ of the digestive tract, they can be given for a long time.

(2.) Both preparations can be given in pretty large doses.

(3.) Both preparations increase the appetite and the bodily weight.

(4.) The pulmonary process is favorably influenced by both of these preparations.

Another good quality of these medications is their tastelessness and powder form.

*Pneumin* is produced by the action of formaldehyde on creosote and forms a yellow, odorless and tasteless powder, soluble in alcohol and ether, but not in water. The dose is from 0.5 gram to 2 grams daily, (equals gr.  $7\frac{1}{2}$ —gr. 30).

*Pulmoform* results from the action of formaldehyde on guaiacol.—(*Ibid*, p. 261 and p. 370 of 1901.)

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#### NEW LABORS IN INTESTINAL PARASITES.

*Ascaris lumbricoides* and long protracted fever is an article by F. Schupper in *Gaz. degli Osped.*, 1901, p. 596.

Woman 23 years old, suddenly taken with fever. After administration of quinine there came an abortion with strong metrorrhagia. Later on the fever recurred, first intermittent, then continuous, with daily remissions lasting more than two weeks, and showing typhoid symptoms, such as abdominal pain, tumefaction of spleen, coated tongue, roseolate

exanthema, etc., etc. On the third week the fever became again intermittent and ceased entirely after an evacuation of an immense number of ascarides. As it is not to be assumed that the ascarides as such produced that fever, we must seek the explanation of that complex of symptoms in assuming that the presence of worms in the intestines of a debilitated individual may so increase the virulence of the bact. coli as to produce an infection. That complex of symptoms is described by Chauffard, who calls it "*Lombricose a forme typhoide*," and we are, therefore, to regard it as a *Colibacillosis*, or place it in the series of fevers of gastrointestinal origin described by Heubner.

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#### THE VIRUS OF THE TAENIA.

By Massineo and Colamida, in *Rif. med.*, 1900, III, p. 191.

Aqueous extracts of tænia were injected (hypodermically, I suppose) into rabbits and guinea pigs and dogs. In the rabbits and guinea pigs it produced tremors of the entire body, general weakness, paralysis of the hind extremities, somnolence lasting 24 hours and more. Other animals experimented upon died, and the autopsy showed pronounced degeneration of the liver and kidneys.

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#### ALTERATIONS OF THE RECTUM.

CAUSED BY OXYURIS VERMICULARIS.

Ruffer relates the following case in the *Brit. Med. Journal*, 1901, I, p. 208. At the autopsy of a 35-year-old Egyptian there was found at about six inches from above the anus, imbedded in the wall of the rectum, a hard tumor the size of a small nut. At a distance of about  $2\frac{1}{2}$

● ● ● ● ● ● ● ●

Pilocarpine is the most powerful of all diaphoretics. What wouldn't our ancestors have done with this sudorific!

Locomotor ataxia and tetanus have been repeatedly reported as cured by the bold administration of pilocarpine.





# Miscellaneous Articles

## A FIRST ORDER AND SAMPLE LETTER.

I enclose my first order for granules, having recently subscribed for the CLINIC. The alkaloidal system is new to me. I am interested in the system but the dosage seems infinitesimal. How can I give codeine gr. 1-67 when I have been giving 2 gr. doses? Saline Laxative acts like a charm but costs 80 cents where Epsom Salts cost me 1½ cents. It is certainly worth the difference but I fear the price will put a man out of practice in the state of Arkansas. I have just taken this practice from an alkaloidal friend who has recently moved away. His unprecedented success he attributed entirely to Dosimetric Medication, and I find that unless I adopt it I shall have to quit the town, as all like his little pills, and the first question I am asked is if I use them. I do not think he has any edge over me and I am determined to give this system a fair trial and see whether it or his good looks made him so successful. If the granules fail me I am going to quit the state, go over to Missouri, quack, sell patent medicines, prescribe whisky, and live on my wife's relations.

A lady, 30, near her term, feet and limbs swollen, eats much meat and eggs.

I fear uremia. What would you recommend?

T. G.,

Arkansas.

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I am glad you are commencing early with the alkaloids. The use of certainties in therapeutics makes a man a better doctor because he has a sure foundation on which to build and compels close observation of cases and also the results of medication. Each granule is a very small dose, but the idea is this: You give one granule at close intervals, possibly every five minutes, until you get the effect you want, and then quit. Suppose you wish to produce sleep with hyoscine and give a granule every five minutes until the patient goes to sleep, you find it has taken seven granules; next time if you want to, you can give the seven granules all at once. It may take only three granules, or it may take fifteen or twenty, but you find exactly how much it will take. After the old way you give one-hundredth of a grain at once and next morning find it was possibly too much, possibly too little, perhaps did not work at all, or was an overdose and made your patient delirious

when you would be very apt to throw it out and never use it again.

Just so with fevers. You may give aconitine every five minutes until the fever breaks and if you find it takes five granules, you can give them all at once if you choose, but as a rule it is better to give them singly because the next time it may take less or more than it did the first. The one essential is that you know exactly what effect to expect from the medicine, and watch for it or tell the nurse to. Then the quick solubility of the alkaloids enables you to get the effect so promptly that you can reach scientific accuracy in your dosage.

In using codeine for cough, give 1-67 grain every five minutes, dissolve in a little hot water and you will soon find the dosage all right. As far as Saline Laxative is concerned there is simply nothing like it, for pleasant taste and perfect action. This is something that patients are generally quite willing to pay for. Let them try Epsom Salts and Saline Laxative and just see if they are not willing to pay a dollar a pound for the latter. People waste a heap more money than that on nonsense, Doctor, and they will go down in their pockets and fish out the dollar when they have got it.

Write to us freely about every difficulty you encounter and we will give you our best advice, until you get such experience as will enable you to advise us in turn. I am not worried over your quitting us if the granules do not do their work. All we want is to get a man to try. If he once does that we have him.

In regard to the lady: Examine the urine for albumin and see whether she is eliminating enough solids. You do

this by taking the specific gravity of the urine and counting the ounces she passes in twenty-four hours, testing a sample from the entire day's secretion. If she is not excreting about 1000 grains there is danger of uremia. While our business is to sell granules, I will say to you, frankly indeed, Doctor, that my best remedy for this condition is buttermilk, two quarts or more every day. Keep the bowels easy with Saline Laxative and you will have no trouble.—ED.

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### ALKALOMETRY.

After using the alkaloidal method for the past eight years I am fully prepared to say that there is no method so successful, convenient, pleasant and safe.

While I am not prepared to say as some do that pneumonia and typhoid fever can be aborted, I can say that we can so jugulate them that it is only a question of time when patients can be restored to their health, and that we are spared the humiliation of seeing the system so far consumed by continued fever that saline injections into the circulation to give them a few more days of life are necessary. Neither are we compelled at any stage of the fever to withhold any medicine on account of depressing influence upon the heart, nor need we resort to ice-packs in order to cool parched frames. There is no fear of heart failure at any time with the alkaloids because all alkaloids are of chemical purity, and we can obtain such control of the physiologic disturbances at the beginning of all acute diseases, that we restore the normal equilibrium, thus jugulating the disease, and curing the pa-

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If phytolaccin dredges away all glandular dirt, why not try it on the next case of mammary cancer? Full doses.

The dose of myrtol is gr. j every hour or even more frequently. The effects are not seen for at least four hours.

tient before any serious organic lesions have been produced.

Before adopting the alkaloids, I went with fear and trembling to cases of pneumonia or typhoid fever, because the old method dealt with uncertainty, while the alkaloids deal with certainty, being given in a shape that allows them to be dissolved and absorbed almost as taken, and enabling us to repeat at short intervals until the desired effect is obtained.

Some of our most learned physicians have clearly demonstrated the importance of a clean alimentary canal. Eight years' experience has proved to me that chemically pure magnesium sulphate in effervescent combination, as prepared by the A. A. Co., of Chicago, with the sulphocarbulates, are essential features in the treatment of any disease, especially in typhoid fever, preventing or removing the accumulation of toxins, and disease breeding debris; with the addition of aconitine, digitalin, berberine, strychnine arsenate, with such other medicines as may be required during the treatment, I feel I am the master of the situation in every case of uncomplicated typhoid fever. In fact, I have scored so many victories over the various diseases with the alkaloids that it has been surprising to myself as well as to my patients. After forty years' experience in the practice of medicine, hospital as well as private, I am prepared to say that the alkaloids are the most efficient and pleasant of all the remedial agents that I have ever used, and if I were forced to take up the old galenic preparations again I would quit the practice at once.

J. T. M. LANE, M. D.

Stanfordville, Ga.



Why wouldn't phytolaccin be a good thing for adenitis, especially enlargement of the cervical glands and spleen?

# CONSUMPTION.

I know you believe in publishing useful things, whether you make or lose by the operation, and I think that is a most noble principle. I have been curing consumption easily; have cured some cases far along, some when I thought there was no hope, and have not lost a case in the early and middle stages. We can cure 90 per cent, and by waking up the profession to look out and not allow any one to get out of reach before treatment, we can eventually cure 100 per cent.

We know how to close the pores of the skin, but who knows how to open them quickly? Sponging the skin with 1 oz. magnesium sulphate to one pint of water, will do it in less than ten minutes by thus opening the pores. It is easy to believe that all diseases result from invasion, "the microbe theory;" and about half the people believe it, and most of the other half believe that few if any diseases so result. And both beliefs are untrue. Big lies are easy to believe. Was it a command to strain at the anopheles and swallow the double-hump bactrian? It would certainly be an expanding exercise.

It seems easy for us to believe in one cause of disease—the microbes—but hard to believe that there are three causes, besides accidents. 1. Closure of the pores, retention. 2. Invasion, including the whole "microbe theory." 3. Sympathetic enervation, the weakening of the power governing metabolism.

And if we go that far, it seems hard to stop there, but there truth stops. Consumption depends on this third cause. You see, if we had not followed it up, we would never have reached our sub-

In myrrhic acid we have the virtues of myrrh as an astringent expectorant for bronchorrhea and other mucous fluxes.

ject on a true basis. Consumption is a chronic condition induced by sympathetic enervation. To raise the nerve power cures it. Many times we hear of the patient gaining weight under the use of tonics. That gain in weight shows that healthy metabolism is re-established, and the real disease cured. But what would naturally happen then? The strengthened mucous glands would throw out an increased amount of albuminous decomposition into the bronchial tubes, in the proper effort to purify the blood and remove waste from the system; just what they have been trying to do all the time, but now they are able to do it faster and better, and the sputum is more abundant and cough worse, and the attendant thinks the case rapidly growing worse and changes treatment to some hurtful anodynes, etc. And although he has the diseased cured, he does not know it, for he does not know what the disease is; and his patient dies.

Strychnine, brucine, prussic acid, quassin, etc., are the tonics that will restore the nerve power. Half a dozen bran buns between meals and at midnight, will keep the blood rich in cell-building material. A general sponging of the skin with magnesium sulphate one ounce, to water one pint, twice or more daily, will keep the skin active, the pores open and the cough loose.

This is the practical and successful cure of consumption. And we can tell how we are progressing. The circulation is directly and exclusively under the control of the sympathetic. When the circulation strengthens, the nerve power behind it is strengthened. The muscular powers improve next. Then there will be a gain in body weight, and that shows the metabolism is re-established

and the disease broken. The treatment must be continued faithfully until the normal weight and strength are gained.

Now, it is very plain that if you add a stimulant to the above treatment, you could reach a case not curable by the tonics alone. Such a stimulant is ammonium muriate, in one-grain or two-grain doses every four to six hours. Any stimulant which favors metabolism will answer. Alcohol will not answer. It is against healthy metabolism. It lets the nerve power down lower than it found it. Wine is even worse, for besides the effect of alcohol it contains an acid which favors the coagulation of albumin. The tonic too must be a vital one, favoring metabolism. Quinine lessens the oxygen-carrying capacity of the blood, and it and all the Calisayas and iodides discourage metabolism, at least they seem to be deficient; also the anodynes, coal-tars, etc., are to be avoided.

To make bran buns, roast the bran like browning coffee and grind it fine in mortar or coffee-mill, mix in one-fourth flour, or enough to make it stick together, and proceed as in making cookies. Cell salts (calcium phosphate gr. 300, sodium phosphate gr. 20, magnesium sulphate gr. 20, potassium sulphate gr. 10, potassium bichromate gr. 3, water teaspoonful 100. Mix) one teaspoonful every four hours while awake, will answer instead of buns, and is best for those having weak digestions, as cell salts require but little digestion. When it is desirable to increase the oxygen-carrying power of the blood, add to the cell salts as above 10 grains each of iron phosphate and manganese dioxide.

When the case is progressing favorably, as shown by the pulse, the patient

As a relaxant nicotine has done good in asthma, colic, angina pectoris, strangulated hernia, and various local spasms.

Phytolaccin is emeto-cathartic in overdoses, narcotic, causing giddiness, amblyopia and even convulsions.



may complain of the cough and of everything that touches him, the roused nerves feel more keenly the discomforts of the situation; but keep on with your everlasting tonic—strychnine is the best, 1-40 to 1-30 grain every 4 to 6 hours—and cell salts or bran buns, and success is certain. Never forget the Epsom sponge-bath. It alone will cure incipient stages, and whether consumption can be cured successfully without the Epsom bath I do not know.

When rheumatism results from retention, it is apt to be terribly painful, and may be cured in ten minutes by opening the pores of the skin with an Epsom sponge bath. Rheumatism results sometimes from invasion, and is cured in two or three days by the treatment for invasion. It may also result from enervation, and is cured like consumption. There is no such disease as rheumatism. It is a symptom of any one of the three diseases. If you had not swallowed the anopheles as you came to him, you could not manage the camel. There is more of this. Study it out.

WM. M. BURGESS, M. D.

Avondale, Tenn.

—:O:—

Dr. Burgess has made remarkable claims for his Epsom baths. But who knows what effects follow the application of salines to the skin? It is a matter for observation, not deduction.—ED.

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Dr. Abbott, if *The Surgical Clinic* is one-fourth as good as THE ALKALOIDAL CLINIC I will receive many times the worth of my money.

L. S. KRAUSS, M. D.

Middletown, Ohio.

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Convulsive tic, and local muscular or "histrionic" spasms, have been treated successfully by the use of nicotine.

#### FAT FREE DIGITALIS.

I read your recent article in THE ALKALOIDAL CLINIC concerning "Fat Free Tincture Digitalis S. & H." with a great deal of interest, and it is a pleasure to note that you are always on the lookout for advances in methods of treatment other than those embodied in your "Dosimetric Granules."

There is no doubt a great advantage in many cases in administering alkaloids or their proximate principles in their purified form, but it is also well known that the alkaloids of some plants do not wholly represent the physiological activity of the drug. Digitalis contains several proximate principles and it seems not unreasonable to suppose that when they are administered in the natural combination in which they exist in the drug and consequently in the Fat Free Tincture, that the effects that you complain of following the uses of large doses of digitalin may be avoided. It is possible to assay and standardize a tincture so that different lots will be essentially the same in their physiological effect and I believe it is much more difficult to attribute the tonic effect of digitalis to any one of its principles than it is to attribute certain effects from the use of alkaloids of such drugs, for instance, as nux vomica and belladonna. Experience has clearly demonstrated that the Fat Free Digitalis does not cause the disturbance to the stomach that the ordinary tincture does. The addition of ammonia water to the finished tincture renders the glucosides more freely soluble in water, hence this tincture is absorbed more quickly when administered by the stomach than is the ordinary tincture and it is less liable to have a

Phytolaccin is the active principle of the poke, of whose berries we stood in awe in childhood, except for making ink.

cumulative effect. Moreover, if an immediate effect is wanted, this tincture is particularly suitable for hypodermic use and the danger you complain of in the administration of digitalin alone is minimized to a very great extent.

C. H. SEARLE, M. D.

Chicago, Ill.

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While I think you have a good preparation in your fat free tincture, it is still open to the objection that the proportion of the glucosides contained in it varies with each lot of leaves treated and you may have one preparation rich in digitonin and another poor in this glucoside so that the effect of the preparation cannot be predicated. Besides, we never use digitalin in large doses. By our system of dosage we always give exactly enough, never too much or too little.—Ed.

**THE SURGICAL CLINIC, PREFERENCES  
UNCOATED INTESTINAL  
ANTISEPTICS.**

The "new baby" *Surgical Clinic* is in my hands and is all right. Now with this seal of my approval you can go ahead and "let the work go on." When the time for the delivery approached, I confess I got very curious—then I got "curiouser and curiouser" like little Alice. Finally I got impatient and wanted to kick, but knowing how busy you are I refrained, and was loyal to that extent that the thought of "miscarriage" or "stillborn baby" never occurred to me and now it's here. Welcome!

When I've got my breath again from a rather unparliamentary amount of work, I will try and add my quota to

your copy, but follow your rule and don't break on it. You know I only care to write when I have something to say.

Being at it, I might as well enter one little kick which has been coming for a long time, viz., I consider the coated variety of the W-A Intestinal Antiseptic tablets unsuitable and unsuited. The tablets are given in cases of impaired digestion, when none but the most necessary work should be asked of the stomach. Moreover, the taste is not disagreeable, why then the coating? My father used up my last coated tablets for distressing flatulence, foul taste, etc., following gripe and received no benefit. I told him to crush the "bullet" to a fine powder. After that—presto change! Tongue cleared up, foul taste disappeared, so did the flatulence.

I know all about those patients who think they ought to have "a change of doings." Well, for those we might prepare a W-A tablet with charcoal or creosote or both added. It would be a change in appearance, taste and smell and would do the work better than a coated bullet that may shoot clear down the gut and come out the rectum.

Peace be with you.

H. I. ACHARD, M. D.

Roselle, Ill.

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The above is right along the line of our idea. We have felt all the time that the coated Intestinal Antiseptic tablets were a mistake. The tablet was put out to meet the demand but have never personally used it with any satisfaction as compared with our use of the plain uncoated tablet, therefore we advise against it.

## The W-A Intestinal Antiseptic tablet

The worst spasm of the worst hysteric will give way to the administration of nicotine, gr. 1-250, every ten minutes,

Never partake of lobster salad and milk unless you have a couple of doses of papayotin in your vest pocket.

is becoming more and more popular as the months go by. It really seems as if the profession was at last, after 20 years of labor by Dr. Waugh and others, waking up to the great importance of the septic, or otherwise, condition of the alimentary canal. It is so nearly the primary source of all evil that the exception but proves the rule.—Ed.

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### THE DOCTORS' GOLD MINE.

Dear Doctor Abbott:—Received your letter a few days ago which aroused my enthusiasm. Immediately sent my application to Dr. Shaller for 500 shares of "Mattie" stock.

I am sorry I am not situated so that I can take more.

H. W. HODGSON, M. D.

—, Md.

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That's right, Doctor. Glad you have got this much. Hope you have got some Burns-Moore also. Both good. Mattie is shipping right now and will soon be one of the largest and most profitable shippers in the locality. The Burns-Moore is fast reaching pay ground. Has already cut two good veins which are being drifted on for development purposes. The Burns-Moore has great prospects. It cuts one of the best mineralized localities in Clear Creek County and owns its overlying properties. It is only a matter of time that it will be a great producer.—Ed.

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*The Surgical Clinic* is just what I need. Ought to have had it long ago. May it live long and prosper.

B. R. MILLER.

New Washington, Ohio.

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The jactitation of chorea magna will give way to the administration of nicotine gr. 1-250, every ten minutes till effect.

### MALARIA.

I was called to see a boy, 3. About three months previously he had had fever and pain in the stomach, which passed away next day, but on the second day came again, and he had continued one day well and next day sick up to the present time. Seven physicians have been employed without relief. One said stomach trouble, another worms, the third rheumatism, and so on.

On examination I found the spleen somewhat enlarged and very tender, tongue coated, pain in stomach, temperature 103.5. Diagnosis, remittent malarial fever.

I ordered the following: Calomel gr. 1-6, one every half hour until twelve were taken; 1 dram of Warburg's tincture every morning before breakfast; and the following mixture: Five granules each of quinine arsenate gr. 1-6, berberine gr. 1-6, hyoscyamine gr. 1-250, and water to make 3 oz. Direct: One teaspoonful every two hours.

Called next day and found him feeling quite well and no fever or pain; ordered medicine continued.

Next day found temp. 103, tongue coated, pain in stomach, tender over spleen. The pain came at 6 a. m., and had not left him at 11 a. m. I gave him cocaine gr. ss, codeine gr. ss, spirits chloroform dram ss, peppermint water to make 3 oz.

Direct: One dram every hour till relieved.

Next day no fever, no pain, and feeling quite well.

May 17, pain in stomach, temp. 101.75, tongue coated. The attack was of six hours' duration and not so severe as the previous ones. Ordered the medicine continued, and called May 20 at 11 a. m.

One especially valuable property of the paw-paw digestants is that of digesting the mass formed by milk and lobster.

His mother said he had a slight attack of pain and fever on the 19th which only lasted two hours, but he was now feeling well, appetite increasing somewhat.

May 23. Temp. normal, no pain, bowels moving daily from the Warburg tincture, with aloes. Slight attack on May 21 for about half an hour. I discontinued the tincture but continued the berberine and quinine. I also gave the following to clean the tongue and increase his appetite: Acid muriatic dilute 1 dram, strychnine sulphate gr. 1-8, quassin gr. 1-12 6 granules, Elixir Lactopeptine enough to make 3 oz. 1 dram in water before meals.

May 25, he was well. No symptoms whatever.

This was a clear case of malaria. I can see no reason why the other physicians did not cure him. Their diagnosis was either wrong or they did not give dose enough. Of course I, being an alkaloidal doctor, must give credit to the alkaloids; and may the time come when all physicians become alkaloidists, and cure diseases as they should be cured, by the alkaloids. Of course it is necessary to have reliable goods for your success, and in my three years of alkaloidal practice I have always found the A. A. Co.'s perfectly reliable, and have had no cause to change.

W. F. RADUE, M. D.

Jersey City, N. J.

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### LIATRIN.

In the June issue page 549 I note what you say as to the qualities of liatrin. I make a saturated mixture of a variety growing in this section. I presume it is *liatris spicata*.

It enjoys a local reputation among the laity as being useful in indigestion, colic and failure of the function of the kidneys.

Only yesterday a gentleman said he knew a plant growing in the flat piney woods, that cured him of a gastric catarrh after a number of physicians had failed to benefit him. It proved to be my old friend, "button snakeroot," rattle-snake's master," etc.

Some years ago I was treating a lady for a functional difficulty of the kidneys. Despite the most assiduous care on my part total suppression of urine ensued, accompanied by toxic symptoms. I passed a catheter so as to be sure it was not retention. I had exhausted my list of diuretics in the vain effort, accompanied with warm sitz baths and counter irritation over the lumbar region. Having on hand an excellent tincture of *liatris spic.* I added four teaspoonfuls to 2-3 glass of water, and gave it every twenty minutes as a last resort, a dose of Rochelle salts being the only other remedy. In eight hours the kidneys secreted freely, the patient recovering.

As it grows abundantly in my vicinity I prepare my own; and I assure you there is no remedy I find more difficulty in keeping on hand—on account of its wide range of utility—than this one. It is as free from injurious action as catnip—a quality not to be despised when one meets with the cyanotic results of the coal-tar tribe of remedies.

I write simply to assure you of the confidence others repose in the virtues of the plant you so modestly refer to. It deserves to rank high in the list of valuable remedial agencies.

A word as to macrotin, or as I employ it, tincture or fluid extract of macrotys.



Nicotine is useless as a rule in treating tobacco users. who are proof against its remedial effects in safe doses.

The dose of papayotin is about one grain taken after each meal. Caroid, papoid and papain are forms of papayotin.

My old preceptor, B. C. Stimson, always gave it as a remedy for habitual cold extremities, cold feet. A health restoring agent in a wide range of disease; after thirty odd years of experience in its use, during which time no large or small medicine case has been without one bottle dedicated to *macrotys rac*. It stays put.

G. W. HOLMES, M. D.  
Sharps, Fla.

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# REST.

How long it takes the profession to realize the benefit of rest as a therapeutic entity. Suspension of function, rest, is the most potent remedy in the practice of both medicine and surgery. In years gone by the actual cautery was used in surgery, for instance in joint tuberculosis. What did it do? It gave rest to the parts by restricting function. Alonzo Clark gave large doses of opium in peritonitis; what did it do? It suspended peristalsis, giving rest. In infantile diarrhea withhold food, and we all know its helpful result. In disease, function is at any rate abnormally performed, then why insist on fretting the tissues by functionation? Give them a rest and recuperation follows. Even the heart rests between its beats. The tree sheds its foliage for a rest through the winter, and in the spring one more concentrated ring of fiber is added to its sturdiness. All nature insists on rest.

Then let us rest parts, and especially so when afflicted with disease. All inflammation if not primarily is at least secondarily of septic nature. Immunity-giving agencies in a part must be given a chance, by enjoining physiologic func-

tion as much as possible; otherwise *locus minoris resistentiæ* results. The painful eye must be closed. The lame limb must be immobilized. The inflamed bowel must carry no food to irritate and infect its peritoneum. It must not be forgotten that inflammation is a living process, which increases and grows because it has life. Keep the parts quiet and infection will not spread as it would otherwise. *Ubi irritatio, ibi affluxus*, is old but true.

With this prelude let me say that I agree with Dr. Russell in his criticism of Dr. Case's treatment of appendicitis. It was clearly the rest given to the parts by permitting no food to be given by the mouth, which was the *propter hoc* of his treatment, and not the exhibition of hyoscyamine. Rest does the business in appendicitis every time. Give absolutely no food *per os*, and your patient gets over the attack; yes, every time, when observed from the start. Try it and be convinced.

Rest allows an attack to subside, and thereafter removal of the appendix is practically safe in the hands of a surgeon. After seeing hundreds of appendices removed and examined after removal, it would seem that appendicitis is a crippling process every time, and the organ had better always be removed in the interim. A dead Indian is the only good Indian.

ROBERT PETER, M. D.  
Chicago, Ill.

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I desire to congratulate you upon your issuance of your new journal. I cannot speak too highly of either.

O. A. HOPKINS, M. D.  
Middlefield, Ohio.

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Nicotine is emphatically a remedy for the robust and plethoric, those needing sedation and depletion pretty badly.

Papayotin forms peptone from albumen as well as do pepsin and hydrochloric acid, and is much easier to take.



**SCIATICA.**

In the January CLINIC Dr. Cline speaks warmly of carbon bisulphide for sciatica. I have recently had several severe cases, keeping the patients in bed. In each I gave this remedy a thorough trial, applying it myself along the affected nerve. In no case did it relieve except for a few minutes, and then not enough to permit sleep.

The only apocynum I could get was the fluid extract, of which I gave ten drops every two hours in hot water for twenty-four hours. The most thorough treatment was thorough evacuation of the bowels every day, rendering them aseptic, ammonium chloride, rhus tox a granule every hour, and strychnine arsenate pushed to heroic doses.

J. DEARBORN, M. D.

Salisbury, N. H.

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Tell us all you can on sciatica.—Ed.

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**A WORD OF GRATITUDE.**

*Editor Alkaloidal Clinic:* I have always recommended your preparations as being the most reliable, most efficient and most satisfactory from beginning till now and while I live I shall continue to do so.

I much regret that I am too old, for what great joy it would be to witness the progress of improvements in practice of the next 20 years. I feel as much interested in the grand progress of medicine as I ever did, yes more, for the sunset of life gives me a clearer conception of the extent and grandeur of the work of the medical profession. Advance

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The furious fighting delirium of the initial stages of typhoid and other fevers would give way nicely to nicotine.

Brothers, continue your valuable labors with your liberality and large-hearted benevolence and may we all, as your disciples who have profited by your instruction, honor your name and preserve your memory while we live in this world.

LEWIS E. MILLER, M. D.

Tom P. O., Monroe Co., Tenn.

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This word from a brother in the profession who goes to his work wearing a crown of gray and a purple robe of experience is sweet indeed. We are striving for the victory.—Ed.

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**COMMENTS.**

"Report on Materia Medica," by C. F. Wahrer, May ALKALOIDAL CLINIC, is a good article. I fully agree with him on what he says on proprietary remedies. It is a strange thing to me why physicians are willing to let some advertiser who has never studied medicine do their prescribing, and furnish compounds at about three or four prices.

"Kick at the Metric," by W. J. Conley, is fully justifiable. Like him I want plain United States. Give us doses in grains and drams and let the metric system go.

"Therapeutic Notes," by A. L. Blesh, does not give a very scientific cause for using antitoxins. He says: "Of course I give them just to be considered an up-to-date doctor." The approbative cowardly idea leads a great many people by the nose but it never had much effect upon me.

There are two remedies that I believe should be investigated by the editors and readers of the CLINIC, and they are

Papayotin is a powerful digestant, digesting every element of the food, fat, albumen and starch, with acid or alkaline alike.

*Daucus Pusillus* and *Lactuca Canadensis*.

In the April SURGICAL CLINIC, page 164, you say: "The two great problems in physics are storage and utilization of the forces in the sun's rays and the rise of the tide." What is meant by the rise of the tide?

What plant contains the largest per cent of berberine?

J. A. BURNETT, M. D.

Belton, Ark.

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The force exerted by the rise and fall of water in the ocean tides is the greatest of all nature's forces not yet utilized.

*Hydrastis canadensis* probably contains the largest percentage of berberine.—Ed.

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#### SMALLPOX.

I gave up a practice of \$300 per month to fight a smallpox epidemic, and my bill has been thrown out of court. I have taken it to the Court of Appeals.

C. L. HUDGINS, M. D.

Olive Hill, Ky.

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I hope most sincerely that you will make those people pay you every cent they owe you. It is a great pity the authorities could not be made to nurse a few cases of smallpox; they would then appreciate the work the physician does in tending them.—Ed.

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*The Surgical Clinic* is O. K. Something that we have needed and something that ought to and will be appreciated.

CHAS. MACNELLY, M. D.

Palo Pinto, Texas.

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Anemics, cachectics, consumptives and all weakly and debilitated persons would seem unfitted for nicotine medication.

SCIATICA.

In the January CLINIC some one asks for the treatment of sciatica. In my experience that trouble depends almost invariably upon some rectal affection. If the general practitioner could only realize how often by attention to local troubles of the rectum, chronic troubles of all sorts in their patients are relieved, they would pay more attention to the rectum and become more familiar with diseases of the same. At first it will be like hunting for a needle in a haystack to find anything but the most palpable troubles, but after a time even minute papillas and fissures can be located. Attend to the rectum locally and your patient will not complain of sciatica. I prefer Pratt's bivalve speculum for that work. The simple introduction and gentle opening of the speculum (stretching the sphincter) will often cure a case of sciatica.

PAUL L. BRICK, M. D.

Le Mars, Iowa.

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I believe there is a whole lot in Dr. Brick's suggestion.—Ed.

INFANTILE PNEUMONIA.

Six weeks ago Mrs. S. brought her six-months-old baby to my office. Temperature 102.5, congestion in both lungs, marked sibilant rales over both lungs, restlessness, cough almost constant, tongue coated, bowels inactive.

I prescribed calomel gr. 1-10 every half hour till ten were given; also aconitine granules 3, emetin granules 6, strychnine arsenate granules 3, ammonia muriate one dram, and water to make three

I am pretty sure Buckley would say that nicotine is the most powerful of remedies in muscular excess. Or glandular?

ounces. Direct: One teaspoonful every fifteen minutes till six doses were given or fever abated, then every half hour or hour as indicated.

Next morning temp. 100 degrees, child doing very well. At 11 p. m. found child apparently dying, temp. 103 degrees, resp. 50, pulse 150, very weak, almost imperceptible at wrist; at times respiration would cease and heart stop for several beats; moving the child would cause it to catch its breath, and then it would breathe for a few minutes and the heart would resume action. I hastily prepared some glonoin and strychnine, and began with a teaspoonful every ten minutes, at the same time shifting the child's position when respiration would stop. After one hour and a half improvement enough had occurred that I could trust matters to the parents, though I gave them no encouragement. I prescribed again as at first but gave no calomel.

Next morning the child was still unconscious, symptoms about the same. Gave enema, bowels not having acted satisfactorily, with no results. Repeated enemas twice a day for two days before there was a good action.

Continued treatment as outlined but gave gloomy prognosis. Saw child again in six hours; seemed a little better but not very encouraging; she remained unconscious all day and most of the following night. During the afternoon we got her to take some breast milk by giving it with a spoon. This was the first nourishment for thirty-six hours or more.

Friday morning found child conscious, temp. 100 degrees, cough loosening up. From Wednesday eve to Friday morning there had been very little cough. I

now discontinued glonoin. Improvement continued very satisfactorily.

Now the points that impressed me as unusual were the very sudden and marked exacerbation of symptoms Wednesday evening, and, in the face of apparent dissolution, the satisfactory action of the glonoin, I think it may well be called, "The Life Saver."

I invite criticism on my treatment.

W. W. SHAFER, M. D.
Ferguson, Mo.

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I cannot too strongly urge the importance of intestinal antiseptics, steam inhalations and hot applications to the chest, in infantile pneumonias.—ED.

ALKALOIDAL NOTES.

I have been a subscriber to THE ALKALOIDAL CLINIC for four years, and I am another who can truthfully say that it has made me a better doctor. I prize it more highly than any journal I ever read. I read it with great interest and when I have read it I feel that I have learned something. I have quite a pile of CLINICS, dated back to '98. They are my reference works.

It is through the constant attention you have directed to the efficacy of the alkaloids, the sulphides, the sulphocarbolates, arsenates, strychnine, calcium iodized, etc., that these excellent remedies have been so extensively used by physicians and so many lives saved.

The sulphocarbolates have become almost a hobby with me. I use them in a multitude of disorders. In cholera infantum I use them liberally, dissolved in warm water; also injected into the bowels, from six to eight grains per

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Contra-indications for pilocarpine: Fatty heart; lung engorgement from heart disease, emphysema or pleurisy.

In hepatic and nephritic colics, the necessary relaxation can be secured by a full dose of pilocarpine to cause sweating.

In the treatment of dropsies when quick reduction of the effusion is needed and cathartics weaken, give pilocarpine.

all odor and green discharges are entirely over. I usually give aconitine a granule every 15 or 20 minutes until the temperature has been reduced to 100 or 101. Whenever there is tympanites I flush the bowels with Abbott's Saline Laxative, and keep this up two or three times a day until all the symptoms have disappeared.

I have had a few cases of peritonitis develop in these summer affections, and in these crushed ice poultices proved the best applications to subdue the inflammation and kill the pain. Veratrine is also a valuable remedy in peritonitis. If collapse occurs in these intestinal cases I give nuclein and strychnine, a granule each every hour until the strength is sufficiently restored for nature to resume her active work.

In fact, if every doctor would give the alkaloids in the right place and at the right time, with a little horse sense, the burden would be much easier and the yoke lighter. We would never have that horrified expression of the dying infant pictured on our consciences or visiting us in our dreams. We would always be sustained by the consciousness of having done our best, and relieved our little fellow-sufferers from that treacherous malady known as "the summer complaint."

Not long since a would-be doctor said there was no "science" in using the ready-dosed granules and triturates as put up by the Abbott Co. He reminded me of the man who strained at a gnat and swallowed a camel.

I use first, last and all the time, the Abbott Saline Laxative, W-A Intestinal Antiseptic, and, in fact, all the alkaloids

the CLINIC recommends, and receive success for my reward.

GEORGE H. INSCOR, M. D.

Ulm, Ark.

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Science! The root of this heresy is the idea that devotion to pure science for its own sake, apart from the question of its utility, is a good thing. We don't deny it. It is a pleasure to know a language, apart from using it as a guide or courier; but when I hire a guide I want one who knows the colloquial dialect rather than the ancient literature of the land in which I am traveling. And what is the doctor who is employed to guide the sufferer on the road to health? Guide or dilettante scholar?

When I am sick I'll take the guide. You may have the devotee of any-science-provided-it's-useless, and heartily welcome.—ED.

SUBSTITUTION.

I wish you would have the A. A. Co. send me 500 W-A Intestinal Antiseptic Tablets. I need them badly. Have been using another party's attempt at your formula and they don't do the work.

DR. H. L. S.

—, Kan.

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Of course the above order was passed on for filling and is only repeated here to give emphasis to the fact that it is impossible for any other manufacturer to reproduce the W-A Intestinal Antiseptic Tablets within "four rows of stumps." As we have repeatedly said, and reiterate, all of the so-called formulas that have been published and that are claimed

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As pilocarpine increases the secretion of earwax, a tendency to excess of this would be another contraindication.

Pilocarpine is one of the few remedies for acute nephritis, where it is necessary to secure elimination instantly.

by jealous rivals to be "just as good" are entirely wrong. They have their origin in a drunken employe that thought he carried with him laboratory secrets when he was kicked out, but fortunately for us he did not.

The W-A Intestinal Antiseptic is a blended compound of the chemically pure sulphocarbates, and the only chemically pure sulphocarbates in the American market are to be found in our laboratories. The blend of the formula is to be credited to our experience, and is, therefore, not common property. We make the goods right, sell them cheap enough, and our friends that use them in comparison soon learn the difference as did Dr. H. L. S.—Ed.

SOMETHING ABOUT DOGS.

One of our good friends in the profession, Dr. C. L. Thudichum, of Wayne, Pa., has been in the dog-training business for some years, and so far as excellency of work is considered has made a great success. I know this, for I am enjoying a dog of his training and recommendation that may stand up to all that is ever claimed for him.

The Doctor has decided to change his business, giving his whole time to professional work, and now desires to dispose of his dogs. I suggested to him to say something to the Clinic family, many of whom I thought would like to avail themselves of the exceptional offers he is making for quick change. I quote from a personal letter:

"Now about the dogs, Doctor. I don't know what to say to sell them. I advertised in *The Field* last week, and got 20 answers and not a single sale, and yet every dog I offered was a bargain at

the price. How would it be to say something like this?

"Doctor, do you want to secure a handsome pointer or setter to share your vacation with you and guard your home and little ones between times? If so, write me. I have four handsome pointers, two males and two females, also two female setters bred as well as they come. These were selected by me for future breeding operations, but I can't give them the necessary attention, and you can have them for less than they cost me. I am only reserving my old shooting dog, Nightshade."

"Really, Doctor, I can't get an advertisement to cover the case into small enough space. When I get to talking dogs, and especially these pointers, I don't know where to quit. One pair of black and whites are the handsomest pair of pups I've seen in 20 years, and they stand me \$50.00. To a quick buyer for the pair I'll take \$30.00, or if singly, for the male \$20.00, \$15.00 for the female.

"I wish I could keep them, but I'll be away at college next winter, and if anything happens they'll die, and then I'll have nothing, so I'd better sacrifice now.

"The reason I haven't answered your letter before was because I've been in bed with a heavy cold and rheumatism for a week past. Yesterday afternoon was my first day up."

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Thinking perhaps the best way to help the Doctor would be by using the above quotation, I submit it to the sports-loving country-located brothers or the city sportsman to communicate with him if interested in acquiring one of these choice hunters. A little outing is good for the body as well as the soul, and as doctors, we ought to take more of them. I should be glad to know that enough of our friends are interested to quickly take up the opportunity presented.—Dr. ABBOTT.

Any sudden attack, febrile, neuralgic, choleraic, convulsive, emotional, would probably be controlled by pilocarpine.

Populin has been recommended as a useful remedy for frequent and painful micturition, and leaky bladders in women.

GOOD FOR DOGS FAD.

DEAR DOCTOR ABBOTT: Just a line to report some alkaloidal results in dogs, as I think it may interest you and, perhaps, CLINIC readers.

Party wrote me several days since, "Five dogs dead with distemper; others will die; can't clear their heads and breathing apparatus. What do you suggest?"

I wrote your New York house to send 500 calcium sulphide, gr. 1-6, and ordered four granules every two hours till the accumulations loosened up, then cut to three on continued improvement, and to keep up four, three times daily, through disease.

For the weakness which always accompanies the trouble I ordered 2 granules strychnine arsenate, gr. 1-134, and one of digitalin, gr. 1-67, four times daily intercurrent with the other treatment, to be eased off as dog gained strength and appetite. I also ordered a 5-grain capsule of salol at night for intestinal antisepsis especially, taking advantage of its other properties at same time.

Party reports to-day, "Dogs doing fine under calcium sulphide and salol, but have one that is going to have chorea—wabbles all around and falls down."

For this condition I have always used strychnine, gr. 1-60, arsenic, gr. 1-100. Have this time written party to write New York for strychnine arsenate, gr. 1-134, and to give 2 granules three times a day for a week and the following week 1-5 gr. nux vomica, then to repeat the strychnine arsenate, and so on, and I have no doubt a perfect recovery will result in that case.

Had this chap received a little more

of the strychnine arsenate and digitalin right through the case I don't think he would have had this trouble at all; but prescribing at long range this way is hard work if one wants to be sure of results. Distemper is the curse of the kennel-man, and if we can only find a treatment that will insure us a loss not heavier than 10 per cent we will be in it. Will experiment further at future opportunities.

C. L. THUDICHUM, M. D., D. V. S.
Wayne, Pa.

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We are pleased to note the good results you are obtaining from alkaloids used on dogs in case of distemper. Your treatment is good and just exactly what I should have given a man under the same conditions, excepting the salol, the indication for which I should have supplied with the W-A Intestinal Antiseptic.

Push your suggested treatment with the dog likely to have chorea and you will probably head it off all right. Your conclusions as to the occasion of the chorea I believe to be correct. I wish that all kennel men and veterinary physicians would awaken to the value of alkalometry in their field of work.—ED.

Of course I want *The Surgical Clinic*. It is the very thing for the general practitioner. Chuck full of good practical thoughts. I believe I voice the sentiments of the majority of the CLINIC family when I say, that it is the bounden duty of every subscriber of THE ALKALOIDAL CLINIC to become paid-up subscribers to *The Surgical Clinic*; firstly because it is well worth the subscription

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My conviction is that pilocarpine has been very insufficiently tested, and a remedy of such power should be tried out.

Populin, it is claimed, is a useful remedy in the whole line of chronic catarrhal affections, as a mild stimulant.

price, and lastly but not least we should all feels that for the past five or six years we have been accepting from the Clinic Publishing Co. entirely too much for our money, and should feel "kinder sneakin' like" and make amends by subscribing for the youngster and "kinder" help him to start to walk.

W. J. REAVES, M. D.

Evansville, Ind.

NOTES.

I have come to keep two drugs on hand for cases that do not appear to respond to ordinary antiseptic treatment. One is Viskolein, a solution of zinc sulphocarbolate with the stimulus obtained from kola. I have used this in typhoid and pneumonia where ordinary means were insufficient, and have been much pleased.

My other remedy in emergencies is Unguentum Crede. It has given me good results in septic cases. Dr. Spittman's case should have had Echafolta in good doses from the beginning. It appears to do for the blood what the sulphocarbolates do for the bowels, and also has a nerve tonic effect.

You speak of pilocarpine as a galactagogue. I had good results from Sanmetto. If it aids to develop atrophic glands, why should it not favor deficient function? Pilocarpine does good work in relieving congested ovaries and testicles.

What is nascent carbolic acid?

Where is Dr. Ochsner's clinic held?

J. E. BROOKING, M. D.

Hallowell, Mo.

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Nascent carbolic acid is that agent just freed from its combinations. It can

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Oedema of the lungs has been reported from pilocarpine, and this is another reason for giving it alkalometrically.

be obtained from Declat & Co., chemists, New York City.

Dr. Ochsner's clinics are held at the Augustana Hospital in this city and are free. He does not lecture, but simply operates from morning till night, three times a week.—ED.

THE EXANTHEM.

Perhaps a few diagnostic points have been overlooked in Dr. Howell's "Exanthem."

I can see that he has been chasing up the rash too closely and has overlooked the tongue and the pulse. If he finds that the tongue cleans wholly or only partially, and gives the strawberry tongue, he can gamble lots on its being scarlet fever. If in addition he finds that the pulse remains near or over 100 per minute after the temperature falls, he can stake his boots on scarlet fever. Further, if the rash lingers in the axilla or folds of joints after fading elsewhere, he has scarlet fever.

As a further test of its being scarlet fever or not, let him find a case where no antipyretic was given, and if he finds no fever but a rapid pulse near 100, he has an epidemic of scarlet fever.

Scarlet fever is probably at this time existing in a mild form, like our smallpox epidemic. No one can expect any disease to have those "fulgurating" signs in each case or in every epidemic. We can never trace it to its origin, especially in its inception.

We hear lots from the laity now, about "disease changing."

Rats! How much has the germ of tuberculosis, or typhoid fever, or Asiatic cholera changed in 50 years? Put the bugs under a microscope and they are

Populin is said to be quite efficient in malarial affections, such as debility, dyspepsia and dysentery, chronic.

the same yesterday and today, too.

Scarlet fever is scarlet fever, and if we are in doubt about the initial symptoms just watch for the sequelæ, and you will be apt to find ulceration within the tympanum, or ulceration on the cornea, or œdema, in some one or more of the cases.

There are cases of scarlatina which act as unreasonably as a balky horse, and we can't tell why either. We must try to group the symptoms as a whole in such cases, as Opie mixed his colors, "with brains." Perhaps I have boiled down some of the salient points of this scourge, because I have been roasted some, and when you get a good thing, keep it—for others. Were I to express my opinion of this epidemic I should say, err on the safe side, as if you don't you may see every day in your drives some blind child to act like Banquo's ghost, "who would not down."

W. W. STYLES, M. D.

South Hero, Vt.

INFANTILE DIARRHEA.

A bottle baby, 16 months old, was seized with violent vomiting, mucous diarrhea, curds passed both ways, temp. 104. Gave no food for 18 hours, aconitine by Shaller's rule; with gelsemin, as the boy jerked; probably rhus would have met the case better, but I have had very little experience with it. Used the W-A Intestinal Antiseptic every hour; baby demurring at the taste I dissolved the tablets in sweetened water.

Dropped all at night after the first. Dropped febrifuge after 48 hours. Fever gone. Kept up antiseptic a week;

Platinum has been recommended as a remedy for syphilis and scrofula, ranking with gold, and this with mercury.

have not yet considered cow's milk admissible. Ground up barley in a coffee mill and gave after 18 hours' fasting. One heaping teaspoonful makes after straining seven ounces of nourishing gruel. After the fever had subsided I added a little cream.

My belief is that in this and many other cases the W-A Intestinal Antiseptic would have cured without the febrifuge.

M. A. JOHNSON, M. D.

Shenandoah, Iowa.

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As the sulphocarbolates have not failed me in over 20 years, in treating children's diarrheas, I have considerable confidence in them.—ED.

ANTITUSSIN.

In the current issue of THE ALKALOIDAL CLINIC is a leading article by Dr. Wahrer, in which he makes an unaccountable and perhaps unwarranted statement as to Antitussin. We enclose herewith a copy of our letter to this gentleman, with the request that you give same space in the next issue of your valued journal. We hope in this to have made the point clear, but should there be any question we would be only too pleased to furnish any further information needed. Besides other errors, the doctor evidently overlooks the fact that fluorine in organic combination is not "a combination of well-known drugs in some other menstruum or aromatics." To our imperfect knowledge this form of fluorine has not as yet been extensively used in therapeutics.

Pre-supposing that the doctor would not have allowed himself to express an opinion without due foundation for his

Podophyllin is contraindicated by all inflammatory conditions of the alimentary canal or its appended glands.

remarks, we are at a loss to understand his utterances. We must fully endorse your remarks on his article and suppose you had an inkling of the truth. Naturally we understand your position in the matter, but as the main injustice has come through your journal, we make the request that you publish the correspondence referring to this matter, merely as a matter of honesty to all concerned, including your subscribers. With best wishes, we are,

Yours very truly,

C. BISCHOFF CO.

P. S.—Under separate cover we send you printed matter for reference as to our claims.

Dr. C. F. Wahrer,

Dear Sir:—Regarding your Report on *Materia Medica* read before the Iowa State Medical Society, as published in *THE ALKALOIDAL CLINIC*, we beg to call your attention to an evident error as to your remarks about Antitussin. This remedy you class with secret preparations, about which, by the way, we know nothing but the names. We must assume that you are fully acquainted with the composition and properties of Antitussin, since you take a positive stand in your remarks about it. The remedy is patented, which means that its composition is known at Washington and may be known by all who care to inquire. Besides we publish fully the exact composition of all our drugs and preparations.

Antitussin is a 5 per cent ointment of difluordiphenyl, *i. e.*, 5 parts difluordiphenyl, 10 parts vaselin, 85 parts chemically pure wool fat (lanolin). Assuming you knew this, we fail to understand your remarks. Difluordiphenyl is a chemical just as are quinine or morphia

and many others. If the physician choose, he can make his own combinations, similar, but varying in strength or in any manner that he may find advisable.

The name Antitussin merely expresses the main purpose for which the preparation is used and in a shorter way than the technical name, it secures the physician in obtaining the actual preparation and prevents substitution.

In the carbohydrate diphenyl $C_6H_5C_6H_5$, two atoms of hydrogen are supplanted by two atoms of fluorine, giving $C_6H_4F_2C_6H_4F_2$, the chemical formula for difluordiphenyl whose physical properties and chemical relations are completely understood. Can we make the matter any clearer?

Under the circumstances we would be exceedingly curious to know your grounds for the remarks as to Antitussin, and you can be fully assured that it is not at all our way to court secrecy as to any *materia medica* products we carry, even if the reports are unfavorable. A cursory glance at the printed matter issued by us will clearly show this.

We look forward to your explanation with much interest and trust you will feel that reparation is due us in mere justice.

Yours very truly,

C. BISCHOFF & CO.

New York, June 21, 1902.

LATE REPENTANCE.

In an article in the *CLINIC* for August, 1901, the writer omitted to credit J. F. Cooper with the treatment of gastric ulcer with medicated air with nebulizer.

Will the editor give treatment of pyloric obstruction with marked dilatation

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The dose of platinum bichloride is approximately given as gr. 1-20, three to six times a day, same care as with mercury.

Podophyllin has a decidedly beneficial effect in diarrhea with mucous stools, and is said to favor solution of gall-stones.

of the stomach, producing large quantities of sour mucous watery fluid? How about a nebulizer, using pressure to distend the stomach?

W. A. R.

—, Mo.

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Pyloric obstruction means cancer, and the only treatment not surgical is the use of condurangin, keeping the organ washed out antiseptically and the usual palliatives, chief among which is cicutine hydrobromate.—Ed.

ANASARCA.

Mrs. H., 71, holstered up in bed, urine suppressed, bowels locked, agonizing dyspnea, no sleep for four days, general anasarca, limbs enormous, temp. subnormal, marked systolic deficiency and frequent intermissions. Children and friends surrounded her bed expecting her death.

She had been treated two weeks for pneumonia.

Diagnosis: Anasarca from cardiac and renal disease due to senile exhaustion and excessive nitrogenous food. I do not report this case as showing any great skill, but I am prompted to do so by reading an article by W. A. Purington, in a recent CLINIC.

My first prescription was *apis mel.* 1 part, *Halsey's apocynum* 3 parts, 5 drops every 2 hours; *elaterium* gr. 1-8 to 1-2 till free uresis; as a cholagog *Merrill's hepatic tablet* every 4 hours; as heart tonic *strychnine arsenate* gr. 1-30.

Next day found quite free action of the kidneys, hepatic action, some rest, heart still weak and asystolic. Added *glonoin* gr. 1-150, *digitalin* one gran-

ule, every two hours, to former prescription.

On the 12th found profuse discharge of characteristic fluid from both kidneys and bowels, breathing easier, patient able to lie down in bed for the first time in weeks. Suspended *elaterium* and gave *Fellows' Hypophosphites*; tongue cleaning. Suspended hepatic and gave aromatic *cascara*.

On the 14th much improvement, edema fast subsiding, heart more regular. Limbs hitherto bandaged twice daily left free, and sponged twice daily in strong salt water; cold sponge to spine in morning.

On the 16th the edema gone and pitting scarcely noticeable, sleeps all night, dyspnea gone, heart regular. Gave *digitalin* and *apis mel.*, suspended *hyoscyamus* and gave *leptandrin*, with massage.

Dismissed on the 19th, convalescent; with infusion *digitalis* and *strychnine*.

I believe this treatment in a case where the heart is weak and the kidneys inactive will give good results, if the case is curable.

C. H. ROGERS, M. D.

Spivey, Kans.

A LOCATION OPPORTUNITY.

Dr. E. W. Barnes of North Powder, Ore., writes us in a private letter, that his little town offers a good opportunity for a young, hustling, general practitioner with surgical propensities. Says that all he will need to have will be a little money, a good outfit of instruments, good habits and lots of hustle. It is a small place in a growing country in a good paying community and with lots of opportunity before it.

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If an overdose or an overeffect of *pilocarpine* should occur, *atropine* is a perfect antidote, given to dry the mouth.

Populin is a tonic astringent exercising a special effect on the duodenum. Dose gr. 1-2 upwards, before meals.

Anyone interested should communicate direct with Dr. Barnes who is a member of the CLINIC family.

DIPHTHERIA.

In the last three months I treated 26 cases of diphtheria with one death.

My treatment was as follows: Calcium sulphide gr. 6 per day; H₂ O₂ spray every hour; painted throat with tincture of iron and glycerin equal parts every two hours; gave the following preparation internally every three hours: Tr. ferri chlor. 3 drams, pot. chlorate 1 dram, glycerin and water equal parts, to a four-ounce mixture; two ounces of eggnog every two hours; whisky *ad libitum*, strychnine *pro re nata*.

I have never used antitoxin. Are the results from antitoxin better than from the above treatment, and would you advise its use in the treatment of this disease? As there are frequent epidemics of this disease in this locality I should like to know the very best treatment.

The CLINIC is certainly the most practical journal published. It is invaluable to the general practitioner.

JAMES O'READY, M. D.
Milbank, S. D.

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Has any published report of antitoxin equaled the above? The question answers itself.—Ed.

EYES OPEN.

You tell me that since March you have been expecting me to write you "something good," presumably for your journal.

This statement arrests my pen every

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Podophyllin has been recommended as efficient for old syphilitic lesions, and to dissolve recent adhesions.

time I take it up intending to reply to your kindly invitation, for I must confess myself at a loss to know what manner of article will meet your definition, as a "good" thing. In these days of pros and cons one needs must be somewhat at a loss in deciding what will seem good to another.

When apparently respectable medical publications, having patronage and hence believers enough to keep them going, teach the fallacy (as they call it) of the bacterial origin of disease, denounce the practice of vaccination, claim that antitoxin is not only valueless but positively harmful, one who has been in general practice for many years and who has by earnest study and careful trial kept himself in touch with the wonderful advance the profession has made all along this line, and who has thoroughly satisfied himself by personal experience that such denunciation is absolutely erroneous and calculated to do grievous injury to practitioner or patients influenced by it, one is forced to look for the true reason for such denunciatory publications; and aside from the folly of adhering to a first statement (*a la* the man who saw a horse sixteen feet high) I can find no reason for this adherence.

However, the editors of the medical journals, while as a rule they are better qualified to decide questions in medical practice, are liable to "err," being "human." And the facts remain: First, specific bacteria are found *in situ* ere the disease develops; second, vaccinated children as well as adults escape attacks of smallpox almost invariably; when under precisely similar exposure and environment other children and adults are attacked and frequently killed by the disease; while third, I have passed

Podophyllin is in large doses an irritant drastic purgative, causing too much distress to be employed alone.

through seven epidemics of diphtheria in each of which I have had proven to me that 1000 to 4000 units of antitoxin has in every instance when administered prevented death, while patients not so protected, with seemingly no difference in any particular save this one, have died.

My dear Doctor, why enlarge? One of the old-time country expressions has it: "The proof of the pudding is in the eating." What I have seen I know, and what I know I must believe, if the opinion of all were to the contrary notwithstanding.

Again, some one has just said to me: "Is it possible that you are running off after false gods in your old days, that you become a homeopath?"

And this because I happened (and by the way it happens often of late) to dispense some alkaloidal granules to this patient. I here want to say that in alkaloidal medication I find the only exact plan, of getting an exact dose, of an exact medicinal agent, known to the profession. Nothing can be used as a satisfactory substitute for the alkaloids. One may differ in opinion as to the quantity of a given medicine that should be given and as to the frequency of the dose, but in the alkaloids you possess in every granule an absolute quantity of medicine upon which you may depend with absolute certainty; a fact in these days of fancy mixtures, that is priceless in value to the man who knows what he wants his patient to have, and why. As to the theory of alkaloidal medication, all thinking practitioners must agree that no two patients may be found upon whom the same dose of any drug is certain to have precisely the same effect. As an instance note the effect of atropine upon a blonde and a brunette.

This true, frequent repetition of small doses soon puts you in possession of the susceptibility of a given patient, when you are in position to push your treatment, to withhold or to change. And this valuable prerogative you can secure by no other known line of medication.

This, of course, is but the beginning of an enumeration of the many advantages of alkaloidal treatment; but, as before asked, why enlarge? The facts are ably and fully set forth in THE ALKALOIDAL CLINIC, one of the very best journals that come to me.

G. W. WHITE, M. D.

Little Rock, Ark.

ALKALOIDS USED HOMEOPATHICALLY.

I am amused and sometimes annoyed at the narrowness of some of your writers, and their absolute ignorance in regard to homeopathy. I hope they do not show the same lack of intelligence in other medical subjects, or it fully accounts for the great amount of sickness in some places. I am also impressed and much benefited by the general character of the articles.

I use the alkaloids myself, homeopathically, in my (now small) private work and find them just splendid for the purpose. Several nominally new remedies I used 25 years ago. Amongst little-talked-of drugs a most valuable medicine, *apis mellifica* (or honey-bee poison) is a good old stand-by in erysipelas, quinsy, rheumatism, etc., and in cases where puffiness is a marked symptom. It is a most important medicine indeed. Also *baptisia tinctoria* (wild indigo), and probably its alkaloid baptisin, is valuable in fevers of a low type. In fact,

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Podophyllin is a true cholagog. increasing waste and stimulating the digestive functions and secretions universally.

Podophyllin is useful in bilious conditions in general, congested liver, sick headache, and bilious malarias.

so important is it that in my own family, if any one seems fagged out or "poorly," a dose of baptisin is administered and all is right.

The children swear by it (how different to old-time medicine, where the elders would swear at it).

Triosteum perfoliatum for sore throat, aching limbs, grip, influenza and ozena. Sticta pulmonaria for cold in the head, grip, catarrh, etc. In fact, one of my friends said, "From practical experience in grip I 'sticta' triosteum always."

Now, I am only a very common, plain, old country doctor, but I speak of things I know certainly, from many years' unbiased experience and use anything that will cure my patient and then study the "pathy" at my leisure.

I find your preparations neat and accurate and they do splendid work homeopathically, whatever they do any other way.

I think Dr. Collins is about right in his article and I certainly do not consider you look at things in a bigoted manner at all. Bigotry and true science are opposed. I wish you all success in your undertakings either above or below ground.

G. E. WALKER, M. D.
Huntington, Fla.

DIABETES INSIPIDUS.

I have cured at least one-half dozen cases of this disease with fluid extract of rhus aromatica. I treat for three months allowing all the water they want to drink. I give the medicine in much larger doses than usually recommended. Jambul has done much for my saccharine diabetic patients.

Facial eczema and black-heads have

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Podophyllin is an admirable remedy in the hands of a therapeutic miser. The smaller the dose the better the effect.

responded to German soap when everything else failed. Apply thickly to the parts and allow it to remain. Use thrice daily.

There is nothing like salt and water for sick people whose tongues are coated and whose mouths need cleaning. Try it often.

X. Y. Z.

Kansas.

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Diabetes is increasingly prevalent and cures should be reported, new remedies tested.—ED.

I hereby congratulate you upon the appearance and general tone of *The Surgical Clinic* and as my work is more or less along that line I shall look forward with much pleasure to a successful and practical journal and wish you much success in your new undertaking.

H. M. LAVELLA, M. D.

Ashtola, Pa.

PNEUMONIA: MORBILLOUS, INFANTILE.

Case 1. January 9, 1902, Edna, 13 months, bottle-fed, delicate child, sick four days with high fever and cough, pulse 125, resp. 70 (asleep), temp. 103.8. Rales general on both lungs, very little air entering left lung, tongue coated, constipated.

Antiphlogistine over entire chest and cotton jacket applied. Aconitine granules 2, digitalin and strychnine arsenate 2 each, nuclein 6, emetin 10, water 3 oz. Direct: One teaspoonful every half-hour for six doses, then every hour. Calcium sulphide gr. 1-6 every hour, calomel gr.

The specific indication for podophyllin is biliousness with dark and offensive stools. Dose gr. 1-12 at bedtime.

1-10 every half-hour. Evening pulse 135, temp. 102, resp. 60.

January 10, had a bad night, profuse perspiration and sleep by 4 a. m.; pulse 120, temp. 101, resp. 46; enema given, apomorphine added.

January 11, pulse 120, temp. 99.3, crying, resp. not taken.

January 12, pulse 140, temp. 103.8, resp. 72. The Antiphlogistine removed the evening before probably caused a backset. Change for worse occurred in the early morning. Fever medicine given every fifteen minutes. Bovine added to the treatment. At 4:40 p. m., pulse 118, temp. 100.2, resp. 50; medicine every hour.

January 13, pulse 118, temp. 99.8. Rochelle salts given.

January 14, slept from 1 a. m. to 7 a. m., without medicine, pulse 122, temp. 98.6 resp. 50 (awake), tongue clean, still much mucus in lungs, cough. Gave nuclein, strychnine arsenate and emetin.

January 15, pulse 108, temp. 98.6, resp. 43 (awake).

January 16, pulse 100, temp. 99.4, resp. 35, constipated, cough bad. Left her on calomel and Rochelle salts, nuclein, strychnine arsenate, quinine arsenate, emetin and quassin, with Bovine.

She recovered rapidly in weight and was able to be around. Other members of the family had *grippe*.

February 9, one month from time she was seen before, croupy cough for two nights, and fever and rapid breathing. At 9:15 p. m., pulse 125, temp. 104.3, resp. 75 (awake), lungs free from rales, no sign of any throat trouble, bowels moved freely, tongue slightly coated. The latter part of the week had been unusually well; this was Sunday even-

ing. Hot camphorated oil applied to chest and cotton jacket; aconitine, digitalin, strychnine arsenate of each two granules, nuclein 10, water 3 oz. Direct: One dram every fifteen minutes for four doses, then every half hour for eight, then hourly. Calomel and calcium sulphide also given.

February 10, at 10 a. m., pulse 114, temp. 102.6, resp. 55 (asleep); very restless all night with cough which had lost its croupy ring. At 5:30 p. m., pulse 130, temp. 104.6, resp. 70 (asleep). Had vomited a number of times during the day.

February 11, rested well, bowels had not moved, abdomen tympanitic, passing much flatus; high enema and turpentine stupes to abdomen, Saline Laxative given. At 10:30 a. m., pulse 114, temp. 101.6, resp. 50. Evening pulse 120, temp. 104.8, resp. 75, both lungs affected. Bowels had moved but tympanites and flatus still present, had cramps.

February 12, had a bad night, resp. up to 90. At 9:30 a. m., pulse 130, temp. 102.8, resp. 78, bowels had moved freely four times, cough very bad, marked recession of soft parts. Gave Bovine.

At 5:30 p. m., pulse 120, temp. 105, resp. 70, had a very bad afternoon, restless and moaning, fever medicine every fifteen minutes. At 9:30 p. m., temp. 105.8, pulse 126, resp. 90, patient looked very bad and I fully expected dissolution before morning. On account of cyanosis and difficult breathing oxygen was used. From 9 to 12 p. m., pulse 124, temp. 105.8, resp. 96.

February 13:—

1 a. m., pulse 130, temp. 105.4, resp. 94.
2 a. m., pulse 130, temp. 105.4 resp. 92.
5 a. m., pulse 120, temp. 104.6, resp. 76.
9:30 a. m., pulse 126, temp. 102.9, resp. 66.



Podophyllin requires about twelve hours to act, and is best given at bedtime with a saline draught in the morning.

Every man's first duty is to himself. Don't take morphine to help you work beyond your natural strength or ability.

Sanguinarine nitrate and glonoin added to treatment this time. At 5:45 p. m., pulse 128, temp. 103.6, resp. 62; 9 p. m., pulse 130, temp. 105.2, resp. 80.

Abdomen much distended and tympanitic, bowels had moved freely. Gave zinc sulphocarbolate one every half to one hour and turpentine stupes.

February 14:—

1 a. m., pulse 124, temp. 104, resp. 72.
4 a. m., pulse 126, temp. 103.2, resp. 72.
9 a. m., pulse 116, temp. 102, resp. 62.

Rested well during night, bowels moved freely, playing this morning. Evening pulse 112, resp. 43; medicine given every half hour.

11 p. m., pulse 126, temp. 101.2, resp. 78.
12 p. m., pulse 126, temp. 101.2, resp. 72.

February 15:—

3 a. m., pulse 126, temp. 101.2, resp. 73.
4 a. m., pulse 108, temp. 101.2, resp. 70.
9 a. m., pulse 108, temp. 101, resp. 64.
11:30 a. m., pulse 120, temp. 99.8, resp. 41.

Other symptoms changed but little, lungs filled with rales, abdomen like a drum, bowels moved freely. Had fairly good afternoon.

February 16:—

3 a. m., pulse 123, temp. 100.6, resp. 40.
7:30 a. m., pulse 116, temp. 99.8, resp. 41.
10:30 a. m., pulse 112, temp. 99.4, resp. 41.

Coughs a great deal, distention of abdomen still present. At 5 and 6 a. m. pulse stopped; had left glonoin to be used should this occur. At 7:30 p. m., pulse 108, temp. 99.6, resp. 39.

February 17, 11 a. m., pulse 110, temp. 99.4, resp. 42. Had a good night, bowels in good condition.

February 18, 9:30 a. m., pulse 110, temp. 98.6, resp. 36. Cough still bad.

February 20, pulse 98, temp. 99.8, resp. 36, plenty of rales still present, otherwise doing fine.

Dismissed the case, leaving her on nuclein, strychnine arsenate, sanguinarine, quinine arsenate and cod-liver oil.

Case 2. Marguerite, 7 months, inmate of Rescue Home, recovering from an attack of measles; pulse 150, temp. 99.8, resp. 88, rales numerous in different parts of chest.

Diagnosis, capillary bronchitis.

February 25, morning pulse 108, temp. 100.6, resp. 72. Evening pulse 130, temp. 100.4, resp. 88, tongue coated, constipated.

February 27, morning pulse 142, temp. 99.2, resp. 82. Evening pulse 90, temp. 100.4, resp. 42.

February 28, morning pulse 122, temp. 100.2, resp. 40. Evening pulse 96, temp. 101.2, resp. 90.

March 1, pulse 136, temp. 99, resp. 30. Very much better, eating and sleeping well, playing in crib and laughing.

March 2 seemed as well as the day before, but about 9 a. m., took a bad turn, vomited several times and red spots were noticed on feet.

At 11:30 a. m., pulse 120, temp. 104.6, resp. 84.

9:30 p. m., temp. 106.

I remained with her all night.

March 3, at 1:45 a. m., resp. 140, recounted several times to be sure, no pulse at wrist. From 9:30 p. m., March 2, the purpuric spots appeared very rapidly. At time of death, 3 a. m., head, face and neck were a dark purple. My diagnosis, purpura hemorrhagica. The surprise in this case to me was the sudden change for the worse, when apparently the critical period had been safely passed. The alkaloids were used in this case also.

Case 3. Donald, 21 days, inmate of Rescue Home. Building very unhy-



The time to stop taking morphine is the very first moment you realize the devil has got a grip on your soul.

For morphine habit: Eliminate continuously, and sustain the heart, rest in bed, or in hot bath, and cultivate your will.

gienic as to ventilation and warmth. When ten days old contracted measles.

January 31, pulse 125, temp. 98.6, resp. 56. Coughs a great deal, breathing very harsh. Bronchitis.

February 25, pulse 120, temp. 99.4, resp. 50. Many rales present in all parts of lungs, mucus would almost choke him. Diagnosis: Capillary bronchitis.

February 26:—

Pulse 136, temp. 100.2, resp. 60.

27—Pulse 150, temp. 99.6, resp. 50.

28—Lay in drowsy stupor and would not nurse.

28—Pulse 120, temp. 99.6, resp. 47.

March:—

1, pulse 138, temp. 99, resp. 60.

2, pulse 132, temp. 99.2, resp. 48.

3, pulse 132, temp. 99, resp. 48.

4, pulse 138, temp. 99.8, resp. 38.

5, pulse 120, temp. 99.6, resp. 38.

6, pulse 108, temp. 99.4, resp. 38.

7, pulse 132, temp. 98.6, resp. 44.*

8, pulse 136, temp. 101.4, resp. 56.

9, pulse 114, temp. 99.4, resp. 50.

Evening pulse 120, temp. 101, resp. 46.

*Breathing easily, rests.

Cyanotic, very weak and chokes; began use of oxygen.

March:—

10, pulse 140, temp. 102.6, resp. 53.

11, pulse 136, temp. 102, resp. 53.

12, pulse 126, temp. 101.6, resp. 59.*

13, pulse 132, temp. 100, resp. 48.

14, pulse 135, temp. 100.4, resp. 60.

15, pulse 138, temp. 99.4, resp. 60.

*Very bad at 3 a. m.

Seemed impossible for him to breathe as lungs were full of mucus. Took a turn for the better, and still continued use of oxygen at times when he became blue.

The stopping of morphine is easy provided the patient wants and wills to stop, and to do it right away, at once.

April:—

2, pulse 140, temp. 100, resp. 45.

6, pulse 108, temp. 101.8, resp. 55.

9, pulse 120, temp. 99.6, resp. 48.

17, he seemed almost well; resp. 27, and we hoped the trouble was ended.

April 18, pulse 120, temp. 104.2, resp. 50. Applied Antiphlogistine and cotton jacket, and fever mixture as before. Gave cicutine for marked twitching of hands and eyes.

April 19, pulse 123, temp. 98.2, resp. 36.

April 26, dismissed case by sending him to country, pulse 116, temp. 98.2, resp. 29; still a good deal of cough and much mucus. Left him on calcium sulphide and Waugh's Anodyne for cough, and Phillip's cod-liver oil with Elixir Lactopeptine. He finally recovered and the lungs cleared up.

The alkaloids were used in this case from the beginning, Bovinine for nutrition.

J. M. McGAVIN, M. D.

Portland, Ore.

—: o:—

Measles in children's homes is deadly. Trousseau records a malignant epidemic in which nearly all died. The Philadelphia Hospital had a series of over a dozen successive deaths. Powerful stimulation, forced feeding, intestinal antiseptics, steam inhalations, and above all else perfect hygienic environment, are the remedies.—ED.

The Surgical Clinic is all right for a surgeon, and it is all right for me, although I do hope I shall never again be called upon to use any surgical instruments, even in vaccination.

R. BROUGHTON, M. D.

Rockford, Ill.



The place to have a boil is on some other fellow; the time to stop morphine is any other time than just now.

AMONG The BOOKS

We deem it advisable to call the reader's attention to the fact that Book Reviews in THE CLINIC are done in THE CLINIC, as everything else in it, *thoroughly*. Often a book gives occasion to the reviewer to say something on the subject of which the book does not, and it, too, is for the benefit of the readers.

Gynecology. By Drs. E. C. Dudley and W. Healy: being Vol. 4 of The Practical Medicine Series of Year Books, published by the Year Book Publishers, Chicago. Price \$1.25.

Like the other volumes of this series, which we have reviewed in the CLINIC, this volume, too, is a very useful resume of the new things which the year has brought us in gynecology, too. This volume, like the others, is a real boon to the progressive physician, be he specialist or not. Often we come upon an item in such a resume, which we can appropriate successfully at once in our daily practice; but the main usefulness of a book like this is the information it gives in *brief words* of what is going on in medicine the world over. The educated physician cannot afford to be ignorant, especially when there are such excellent books as this one at such a small price.

There came to our desk some time ago three Quiz Compends from P. Blakiston's Son & Co. One, a *Compend of Human Anatomy*, including the anatomy of the viscera, by Prof. S. O. L. Potter, sixth revised and enlarged edition, with 117 engravings, numerous tables and plates of nerves and arteries. Price 80c. The book is very commendable for its fulness yet brevity of statement and its very useful illustrations.

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The other two volumes are Parts 1 and 2 of *Practice*, by Dr. Hughes; same price for each volume. These volumes are not written catechetically, and for thoroughness of examination could not well be, without great voluminousness. But the epitomic statements of diseases and their treatments in these two small volumes are well given, and a quiz can be excellently conducted from them. All the three volumes are very recommendable.

✽

The Composite Man, as Comprehended in Fourteen Anatomical Impersonations. By E. H. Pratt, A. M., M. D.,

LL. D. Second edition. Chicago, 1902. The New Publishing House. \$1.50.

A most entertaining, instructive, original and unique book for both the physician and layman. The bony, muscular, arterial, venous, lymphatic, skin, connective tissue, cerebrospinal, tubular, sympathetic, organic, conscious, subconscious and composite Man; each one of these addresses himself to the reader in quaint style but with never aging truth.

❖

Diagnosis of Surgical Diseases, by Dr. E. Albert, translated by Dr. R. T. Frank, with 53 illustrations. D. Appleton & Co., 1902. \$5.00.

This book is a valuable addition to the scant monographic literature on the subject. The paper, type, and illustration are quite sumptuously gotten up.

❖

Quain's Dictionary of Medicine. Third edition. Edited by H. M. Murray, M. D., F. R. C. P., and two assistants. D. Appleton & Co., 1902. \$10.00.

The articles are written by various authors and, of course, contain the latest that is known on the subjects they treat. As a one-volume medical reference book, it is the latest, fullest, and most useful for the student and practitioner.

❖

The Roller Bandage, by Wm. B. Hopkins, M. D., with illustrations. Revised fifth edition. J. B. Lippincott Co., \$1.50. Frequently the bandage, of which the roller is basic, is of as great importance as is the knife and the needle, and the well applied bandage is always the token and badge of the elegant and skillful operator. A mere slashing oper-

ator never learns how to bandage. Every student and physician who feel their deficiency in this line, will find an instructive friend in this book.

❖

Diagnosis by means of the Blood, illustrated by 154 Photomicrographs of specimens of blood as observed in general practice, showing products that are found in definite diseases. By Robert L. Watkins, M. D., 1902. Publishers, The Physicians' Book Publishing Co., New York, \$5.00. The book is a path breaker. It promises much to the busy physician both in city and country in the way of securing certainty of diagnosis, and that with much less than laboratory methods and instruments.

❖

The Eclectic Practice in Diseases of Children, for Students and Practitioners. By William Nelson Mundy, M. D. 12 mo., 631 pp., cloth, \$2.50 net. The Scudder Bros. Co., Publishers, Cincinnati, O., 1902.

This book is not the old "Scudder's Diseases of Children" under a new name and date, but a further elaboration of the subject on the basis of that book. There are also in the book before us many valuable additions in accord with the advances of the medical sciences and arts, but everything, however, is orthodoxly Eclectic.

❖

American Edition of *Nothnagel's Encyclopedia*. Diphtheria, Measles, Scarlet Fever, and German Measles. Diphtheria, by Wm. P. Northrup, M. D., of New York. Measles, Scarlet Fever and German Measles, by Professor Dr. Th. von Jurgensen. Edited, with additions, by

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Pilocarpine has been given to break up the attack of yellow fever with remarkable results. It deserves fuller trial.

Prurigo, senile, anal and vulvar pruritus. cease from troubling for a season after a full dose of pilocarpine.

William P. Northrup, M. D. Handsome octavo, 672 pages, illustrated, including 24 full-page plates, three of them in colors. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$5.00 net; half morocco, \$6.00 net.

The subjects of this volume are treated most exhaustively from their histories down to their latest prophylaxes, treatment and sanitary protection. The illustrations are very helpful.

❖

Transactions of the Vermont State Medical Society, held at Montpelier, Vt., October 10, 11, 1901. Secretary Geo. H. Gorham, Bellows Falls, Vt.

Of general interest in these transactions are the papers read before the society, each one of which will interest one of our readers. They are: Infantile Mortality; Gall-Stones as a Surgical Affection; Preparation of Patients for and Treatment After Laparotomy; Gunshot-wounds of the Abdomen; Posterior Pudental Hernia (Perineal H.); La Grippe and the Nervous System; Dislocation of Hip during Normal Labor; Symposium on Typhoid Fever. In all of these the reader will find vast information, excellently direct and simple diction.

❖

Anatomical and Physiological Encyclopedic Chart of the Human Body. Designed and prepared by Irving J. Eales, M. D. A. P., and C. Wilbur Taber, D. O., 1315 Masonic Temple, Chicago, Ill. \$5.00.

The chart is 42x32 inches, mounted on cloth, and printed on both sides. It is designed for Osteopaths, but is correct in every particular, and reliable and useful for any physician for quick reference,

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Pilocarpine given in full doses has the property of contracting the spleen when enlarged from malaria or other causes.

after one has familiarized himself with the scheme of colors and tables. The contents of the chart, which is really two charts, perfectly fulfill the name and claim in the title. The printing is very clear and striking. It will best serve to have it hung on a standing frame so that both sides be accessible. The price is very moderate, considering the amount of mental and manual labor expended on this valuable work.

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Progressive Medicine, a quarterly Digest of Advances, Discoveries and Improvements in Medical and Surgical Science. Edited by Drs. H. A. Hare and H. R. M. Landis. The following retrospect of recent labors are: Abdominal Surgery, including Hernia, by Dr. Wm. B. Coley; Gynecology, by J. G. Clark; Diseases of the Blood and Ductless Glands, the Hemorrhagic and Metabolic Diseases, by Dr. A. Stengel; Ophthalmology, by Dr. F. Jackson. All these are excellent and full of interesting information, but the article on the blood is indispensable for every progressive physician; it is beyond my praise. The index is quite full and serviceable. The price of \$10.00 per annum, or \$2.50 per volume, considering the amount and rare quality of the work, and the fine mechanical execution always to be realized from Lea Bros., the publishers, is astonishingly low.

❖

Practical Dietetics, with special reference to Diet in Disease. By Dr. W. Gilman Thompson. Second edition enlarged and thoroughly revised. D. Appleton & Co. \$5.00.

The progressive physician of to-day concerns himself as much about the ma-

Pilocarpine is specific for jaundice and relieves the itching of all forms, except that of hepatic cancer alone.

teria alimentaria as about the materia medica. There is not only a dietary for the sick and convalescents, but there is also a Dietotherapy to a good extent. The book before us is encyclopedic in these lines. Its 814 pages refer to about 800 items, treated more or less at length. It tells not only *what* to give to the patient, but how to *prepare* it, and *how* to give it. All these our schools have not taught us, and hardly teach them even now, and yet we must all know all about diet. We do not use a hackneyed exaggeration when we say that the profession owes a debt of gratitude to the author for this book. The mechanical part of the book is in the usual excellent style of the Appletons.



A Reference Handbook of The Medical Sciences, embracing the entire Range of Scientific and Practical Medicine and allied Sciences. By various writers. New, completely revised and rewritten edition. Dr. H. Buck, Editor. Vol. 4, illustrated by chromolithographs and 850 half-tone and wood engravings. New York, Wm. Wood & Co., 1902. Cloth, \$7.00; sheep, \$8.00, and half-morocco, \$9.00. The work is promised to be completed in eight volumes. The work is a subscription one, and is not sold separately. We have reviewed adulatorily and justly the previous three volumes, and we cannot say anything else of this excellent volume. The excellency of the four volumes is both qualitative and quantitative. The general and special practitioner will find whatever information he needs on any medical topic, or topics related nearly or remotely to it, and the information is practical, reliable, and up-to-date. For the scientific investigator the refer-

ences to the literatures of each article are most valuable, and at the same time betoken the extensiveness of the researches of the various contributors of this grand work.



Crumbs of Comfort. How to cure the sick. By J. W. Cutler, B. A., M. D., Milwaukee, Wis. \$2.00.

This volume is marked First Edition, and is dedicated "To all whose judgment is better than their creed." And a blessed thing it is that there is such a big crowd of that kind in the present materialistic world. The doctrine of the author is that of the school which affects to pay little or no attention to Anamnesis and Pathology and concentrates it mainly on symptoms, hence I would dominate all such "Symptomoiatrists." And to their slogan, "We cure the Patient, and not the Disease," I would reply, "You cure neither, but only symptoms." "Symptoms," says the author, "are the visible signs of disease, and the curative remedy is the one which corresponds to the greatest number of symptoms." In a short introduction the author gives most excellent advice about the sick room. Diseases are arranged alphabetically from Abortion to Yawning, and the medicines prescribed are those of which the author knows best. A shorter part is devoted to "Drugs and their uses," and still a shorter part, but very useful one, to "Minimal and Maximal Doses." Paper, print, binding, and shape are very commendable, and so is the whole book for its kindly and fresh spirit.



Sociologic Studies of a Medico-legal Nature, by S. J. Rosenberg, L. L. B.,



In emergencies and to break up fevers give pilocarpine gr. 1-6 at once, and repeat in an hour if sweating does not ensue.

Morphine and atropine are each antidoted over part of their field of action by pilocarpine, which, however, is weaker.

and N. E. Aronstam, M. D., Ph. G. Publishers, Engelhard & Co., 1902. \$1.00.

The study of society, not only of upper-tendom, presses itself at present into all sciences and arts, and so into medicine, which is rooted in both. This the writer of these lines takes to be the result of the preached Golden Rule, and the great Master who endorsed it. Not that the age has become ideally ethical, but that that rule and that Master work as an antidote to the intense materialism and selfishness of the age.

The book before us is, therefore, of great interest. The first article, on Crime, contends that crime is no crime but a disease, hence not to be despised and punished, but commiserated and treated medically. There are grains of truth in these ideas, but they must be taken with a good many grains of salt. The great trouble with these materialistic ideas of crime is that they destroy the sense of sin and responsibility, and assume a perfection of medical knowledge, which does not exist. But the article is well written and deserves a careful reading.

The article on "The Drink Evil" is written in better spirit than the hackneyed intemperate prohibitive one. To the sociologically prophylactic measures recommended here we would add the temporary disfranchisement of the habitual drunkard, and putting him and his affairs under probate administration. In our country a man in such conditions is worse than ostracised, and the threat would deter a man from yielding to the temptation. The article is a good one, but is somewhat marred by improper grammar and sins against English and Latin, *usus loquendi*, which is the un-

pleasant duty of the reviewer who reads what he reviews to point out. On page 33, "relish" is improperly used with "given" in the sense of relishing a thing. We relish a thing, but we do not give it a relish by doing so. On page 36 we have "*per vis*," etc. "Per" governs the accusative, and "vis" is not of neuter gender. Down on the same page we have "fear *for* work" in the sense of "afraid *of* work." On page 37, line 3, top, "its" should be "their" to agree with "cells." On the same page, fifth line, bottom, "down" should be "over" to give sense to Dr. Crothers' idea. And in line three there, "to" should be left out, for we do not concede *to* the thing which we concede. On page 42 "indemnity" is improperly used for "penalty," for imprisonment is not a compensation.

The article on Euthanasia is excellent.

The article on Stirpiculture is very good, and sadly needed to be propagated are the thoughts about marriage there contained. The spread of disease through heredity is as evident as it is unattended to. But the author goes too far when on page 74-5 he says: "Diphtheria, smallpox and typhoid fever would have long since been things of the past if we had been able to enucleate the predisposing and inherited agencies favoring the entrance of disease. In fact all ailments which human flesh is heir to are the results of a weakening of the human organism from the transmission of predisposing conditions." This is an altogether too sweeping assumption, and is justifiable on the principle only of asking much in order to get at least a little. On page 76 there is a capital A, which makes a capital Irish bull. "We



For deafness, alopecia, or itching, give pilocarpine to evident effect and then stop till the next day, when repeat.

Even that most hopeless of maladies, hydrophobia, is said to have been cured by the full doses of pilocarpine.

look at his Pharynx; what do we see here? A Coloboma—a total absence of it." Query: Absence of what? Coloboma? How could you see it? But the author must mean grammatically to refer to "pharynx," but this is very loosely stated, anatomically, for the beginning of the œsophagus is also part of the pharynx. The author means a cleft palate; then why not say so? On page 81 we meet with the old saying: "*Mens sana in corpore sane est.*" "*Sane*" is a mistake, and should be "*sano.*" But the whole sentence as given by the author is incorrect. In Hoyt's Cyclopedia of Practical Quotations it reads correctly: "*Orandum est ut sit mens sana in corpore sano.*" This is very far from the author's rendering of it: "A sound and firm body denotes a sound mind." Juvenal simply says: "It is to be prayed for, that a healthy mind should be in a healthy body." But the prayer is not always answered, and we have many sound minds in very unsound bodies, and many sound bodies domiciling unsound minds. And here I take occasion to say, that it is time to assert the reverse truth of that mutilated saying, and say: "*Corpus sanum per mens sana est.*"

"The Education of Feeble-Minded Children" is another good article. On page 88 the author says: "The metamorphosis from feeble-mindedness and imbecility—to criminality is not infrequently very far off." Then it follows that it is frequently very far off, and this is certainly not true, and the context shows that the author meant the very reverse. But put another "not" before "very" and the knot is unraveled.

"Premature Burial" is another very useful article. The possibility of such an

unfortunate event cannot be doubted, except in case of embalmed bodies, and should be prevented.

"Amnesia" is an interesting article relating to medico-legal questions of witnessing, which may become invalidated by temporary brain disability.

Suicide is another article, and is treated from the Darwinian standpoint, viz., the survival of the fittest and the destruction of the unfit. The author divides suicide in Pseudo and Genuine. This sounds like killing a little and killing entirely. Why not say sane and insane suicide? The author is not a reliable Biblical scholar, as he places Samson, Saul and his armor-bearer, and Ahithophel in the Pentateuch, and yet he speaks with assured authority, what the Jews believed or not believed, of a future life. Ridiculous!

Tuberculosis is the last subject treated of in this book. The author asserts that "the majority of skin diseases are of a tubercular nature." This is about as true as the early assertion of homeopaths that all diseases are of psoratic origin.

The legislative action the author recommends for the prevention of the spread of disease contains some good points.

We lingered so long in the review of this small book, because the subjects it treats are of vast importance to society.

■

If any works are published in which our readers are interested, and no notices of them appear in this department, kindly call attention to them, and we will write to the publishers for copies. Otherwise we notice such works as are sent to us for that purpose.



For erysipelas, give pilocarpine to produce slight sweating and then often enough to keep up slight sweating, but don't let go.

To relieve urticaria or nettle rash and all other itchings, give pilocarpine enough to cause slight sweating.

Condensed QUERIES Answered

PLEASE NOTE.

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage, and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

QUERIES.

QUERY 3253:—"Neurasthenia." I am becoming interested in the alkaloids, and want to become more familiar with them. What work would you suggest and what line of treatment for neurasthenia, for instance.

H. H. E., Nebraska.

You would find what you want in literature in Burggraefe's Manual, Shaller's Guide, or Waugh's Diseases of the Respiratory Organs. For neurasthenia I would recommend Saline Laxative to clear the bowels, because autotoxemia is at the bottom of most cases; then give zinc phosphide gr. 1-6 four times a day for a week, and follow up what you have gained by the Triple Arsenates with Nuclein, never allowing the possibility of autotoxemia to supervene. Hot salt baths are also of advantage.—Ed.

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QUERY 3254:—"Galactorrhea." My wife, 17, her milk has flowed without ceasing since the seventh month of pregnancy.

Our baby, born July 4 last, vomits each time he nurses. Stools natural, hic-cough almost constant.

J. S., Wisconsin.

You can do no harm by stopping the flow with atropine; however, you might first try phytolaccin 7 granules a day for a week, or a little of the fluid extract gently rubbed into the breasts.

Give the baby juglandin, $\frac{1}{4}$ of a granule every hour until the bowels are loosened perceptibly; and as a direct remedy for the vomiting, take a Compound Manganese tablet, dissolved in 7 teaspoonfuls of water, and give a teaspoonful every hour.

There is another most valuable remedy for children, and that is the formula known as Neutralizing Cordial, which would be all right provided the sugar is not objectionable.—Ed.

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QUERY 3255:—"Fever." I have been ill two weeks, and am at a loss. My fever has been running 100 to 101 in

the morning, a little less at noon, 101 to 102 in the evenings. I have no aches nor pains, no enteric symptoms, bowels perfect, when in bed feel able to get up and work, but on attempting to walk my weakness is apparent and I become dizzy. I sleep well, no cough, no chills, just this miserable fever; but about 7 a. m. have a profuse sweat if I put on an extra cover.

A. L. S., Illinois.

I think it is a typhoid, Doctor; or possibly autotoxemic fever; and would suggest the following treatment: 10 grains of calomel, followed by Saline Laxative, and the W-A Intestinal Antiseptic Tablets one every hour. See that the hygiene of the house and vicinity is in proper order, and if not, put them in perfect order. Take strychnine hypophosphite 1 to 3 granules every hour until the pulse is natural in tone. Diet to consist of predigested foods—junket, kumyss, raw eggs, fresh fruit juices, especially the latter.—Ed.

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QUERY 3256:—"Gall-stone chills." Man, 54, chronic malaria, paroxysms 6 months, not periodic, 2 or 3 day intervals, each lasting 10 hours, sweating stage sometimes prolonged to even 36 hours, liver much congested and enlarged, double normal size, bile entirely absent from bowel for 2 months, intense jaundice, enormous quantities of bile in urine, lost 35 pounds in 4 months; on salines, quinine and Warburg's tincture. Jaundice now only present after chills, liver less, no bile in urine, present in stools, weight and strength increased, chills recur 7 to 9 days, keeping him disabled, drugs named lost power; patient a doctor, residence where malaria is rare.

Case 2: Girl, 25, simple goiter, 3 years, small.

R. R., Illinois.

Your first case is not malaria but gall-

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Platinum is another remedy that has been neglected, because it has been assumed to resemble gold therapeutically.

stones of rare form. The treatment is sodium succinate 5 grains, dioscorein 3 granules, boldine 2 granules, given four times a day, under which the symptoms will gradually subside and within a year cease entirely.

For the goiter apply iodine driven in by cataphoresis, giving phytolaccin internally up to the limit of toleration.—Ed.

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QUERY 3257:—"Constipation." I saw somewhere that alnuin was good for constipation in infants. Was I right?

B. J. B., Maryland.

I don't know about alnuin. Lobelin is highly recommended for constipation of infants, but is only useful to them when given in solution. I much prefer, however, Morris' idea of giving them large quantities of fat in their food. If this fails, cover your index finger with soap and pass it through the anal sphincter.—Ed.

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QUERY 3258:—"Paris Green." Gooseberry bushes were sprayed with Paris green when in bloom. Several children ate the berries, and one, a 12-year-old girl, was suddenly taken ill with vomiting. Ill 7 weeks, high fever; in 5 weeks was up and ate a small piece of gooseberry pie, and had a relapse. No fever till noon, when it rises to 103, pulse good, tongue clean, eats well, very thin. Trouble seems in the bowels; abdomen hard at times, then tympanitic, no pain, kidneys do not act well.

S. G. M., Ohio.

Paris green is simply arsenic, or rather copper arsenite, and would present the symptoms of arsenic poisoning; which may be present, but you have not described them. From what description you give, I would look on the case as

While podophyllin is too acrid for use as a cathartic alone, it is an admirable ingredient of cathartic combinations.

one of those often described as appendicitis, but really an enteritis depending on unwholesome food. My treatment would be hyoscyamine and strychnine arsenate, both kept up to full effect; the bowels to be flushed with castor oil and colonic flushing, and the W-A Intestinal Antiseptic Tablets, 1 every two hours. After a few days I should add oil of turpentine, a 5-minim capsule every two hours.—Ed.

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QUERY 3259:—"Constipation." Chronic constipation, 6 years' duration, whole materia medica has failed, has to use syringe daily, trouble in lower bowel.

J. E. S., Indiana.

Atropine is said to relieve spasm of the anal sphincter, and may be first tried. Most assuredly give the patient an anesthetic and dilate the sphincter completely and thoroughly. After that, the Anti-constipation granules will work to a charm.—Ed.

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QUERY 3260:—"Cirrhosis." My brother has been critically ill, cirrhosis of liver; very protracted spell of chronic biliousness in 1898, again in 1900 his liver troubled him, was very bilious and general debility. I induced him to join me on a hunt. He finished up by a trip to the Gulf, late in the fall. He has not been well since '98, although he continued at his work until 5 months ago. He is 53, average weight 160 very muscular; always temperate, neither addicted to intoxicating drinks or to tobacco to any extent. Occupation, railroad official work, ruddy complexion, but now ashy-yellow. Integument beneath clothing bronze. Tongue generally furred yellow, sclerotic tinged quite yellow, looks like typical jaundice. No appetite, bowels loose, evacuation light color and often watery. Very weak; spells of pallor, especially

mornings on rising. Pulse weak, requiring stimulation. Two months ago suffered a slight paralytic stroke, but in a few days this passed away. Undoubtedly contracted liver, slight ascites. I had him take chionanthus, chelidonium, cardus mar, strychn. sulph., strychn. arsen. Fowler's solution, blue mass, occasionally, tonics of course, and the following, which apparently did him most good: Juniper berries dr. ijss, infused in water oz. viiss; then add acetate potash, nitrate potash aa dr. ss, oxymel of squill oz. ss, syrup of five roots oz. j, a French diuretic composed of ash, fennel, parsley, asparagus and small holly, each 1 part to 30 parts of sugar. and sufficient water to make syrup; one to two teaspoonfuls three times a day, with Protocolein and such intercurrent agents as needed. He continues much the same, no worse, if anything better, but gains very slowly. May not some of the profession suggest something better? I appeal to the fraternity to write me their advice, not from theory, but from actual experience. I cured two very bad cases of cirrhosis of the liver with the treatment outlined, exhibiting the pathognomonic symptoms of that disease, but its action seems mighty slow in my brother's case. I had to place him on the intestinal antiseptics, and Tannopin for his bowels a number of times.

J. M. L., Iowa.

In this case I would advise boldine 2 granules, berberine gr. 1-6, 2 granules, and the Triple Arsenates with Nuclein 3 granules, to be taken together before each meal and on going to bed. In addition to this keep his bowels regular with Eclectic Hepatic tablets at bedtime, and Saline Laxative in the morning; and aseptic with about 7 W-A Intestinal Antiseptic Tablets daily. As a heart tonic add to the above apocynin, 2 to 4 granules every two hours, according to the dropsy. Limit the amount of liquid he

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What an enticing path is the testing of remedies and the study of their therapeutic applications, but few follow it.

For further suggestions on these queries see the "Ad Index" in the advertising pages following.

takes and keep him out of the malarial climate.—Ed.

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QUERY 3261:—"Neurosis." Large, fleshy German, female, 47, several children, sick a year, attacks of syncope, usually directly after monthly flow, but occasionally at other times; last several minutes, during which she is seemingly unconscious, breathing shallow or suspended, heart-action feeble and irregular, occasional pain in cardiac area, no convulsive movements, generally in evening, periods irregular and at times profuse, eats too much, tongue slightly coated, digestion fair, bowels regular, kidneys do not functionate properly, urine at times scanty and highly acid, headache, pain in back and limbs, especially right thigh, very nervous, walks about room at night acting strangely and seemingly unconscious. Treatment: Purgatives and diuretics, tonics and nerve sedatives, syr. hypophos. comp., Buckley's Uterine Tonic, Neurilla and scutellarin, nux and digitalis for feeble heart, the latter seemed to prevent syncope; tried to regulate diet, but without success; uses some tobacco.

C. E. F., Illinois.

This woman needs apocynin 2 granules or more before meals and on going to bed, adding caulophyllin in the same dose during the menstrual week. Regulate her diet to her needs. Apocynin will act on both kidneys and bowels, at the same time strengthening the heart. It seems to have a special effect on maladies occurring about the menstrual period. Caulophyllin is an excellent nervous sedative, relieving mental unrest. Possibly cicutine might be found more effective when she is very nervous, but I would hold that in reserve, using it to reinforce the caulophyllin if necessary.—Ed.

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QUERY 3262:—"Autotoxemia." Young

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Platinum has been recommended as a remedy for impotence, effective alike for both sexes, increasing the sexual power.

lady, 25, sleeps badly, horrible dreams, poor appetite, muddy complexion, tongue coated, constantly tired, achy feeling, then severe blue spells, no constipation or menstrual disorder, no energy or life, examination of stomach contents shows slight subacidity and gastropotosis, moderate dilatation with marked retention of food; urine loaded with urates.

R. C., Maryland.

I fail to see any difficulty whatever. Note whether the excretion of urinary solids is fully up to the standard. In spite of the no-constipation statement, give here juglandin, berberine gr. 1-6, copper arsenite gr. 1-250 and 1 Intestinal Antiseptic Tablet, together every two hours while awake. Forbid all cold drinks and ices. Let her eat very slowly, chewing thoroughly, and never fill the stomach, and don't change this prescription for a month. Don't let her marry until she is cured.—Ed.

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QUERIES 3263-4:—"Constipation." A woman has had no stool without cathartics for 9 years. She is 27. I cannot afford to fail here.

"No. 407." Will No. 407 of the A. A. Co.'s list cure chronic vaginitis, ulcerated os? Can it be used in the rectum?

M. A. J., Iowa.

There is no such word as *fail* when treating constipation with Waugh's granules. I think you had better give her colonic flushings. A tablespoonful of salt dissolved in a quart of warm water is pretty effective, and this may have to be repeated. After she is once cleared, give 6 of the granules three times a day. I think you will have no trouble in curing the vaginitis with No. 407. While it can be used by the rectum, we rather urge the use of the hemorrhoidal astrigent as a local remedy here.—Ed.

In very small doses podophyllin has been recommended as effective in cholera morbus and infantum. Very small doses.

QUERY 3265:—"Dropsy." Lady, 47, weight 205, treated for years for dropsy, legs swell to thigh, varicose veins, abdomen puffy, heart very weak, bilious attacks, head aches on moving; urine 32 oz. in 24 hours, s. g. 1022, no sugar nor albumin; she needs something to stimulate the kidneys and strengthen the heart.

J. M. T., Texas.

In this case my principal remedy would be apocynin, 1 granule every two hours gradually increased to 4 if necessary. Limit closely the amount of liquid she takes. Make her eat her food dry, with a teacupful of hot liquid of any sort after she is through with her meal. The apocynin will, I believe, accomplish everything needed in this case, if the dry diet is instituted as described.—Ed.

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QUERY 3266:—"Malaria." I am suffering with chronic malaria and anemia; am 47, here 16 months, had severe dysentery 6 months after coming, am unable to regain my health. General breakdown. Hepatic torpor. Tonics fail. Lost 30 pounds.

C. E. E., Indian Territory.

Clear the alimentary canal with one or more Eclectic Hepatic tablets at bedtime and an adequate dose of Saline Laxative in the morning. Take the Triple Arsenates 2, and 1 granule of berberine gr. 1-6, every two hours excepting when asleep. Boil your drinking water. Regulate your diet carefully according to its needs, and I am confident you will find the difficulty disappear. If in one week you do not find yourself improving, add to the above, nuclein, 30 minims a day. You had better also apply over your liver the following mixture: Freshly prepared nitro-hydrochloric acid, strong, ½ ounce, ammonium chloride ½ ounce, water enough to dissolve, which will be

about 2 ounces. Paint this over the liver three times a day, and take 20 drops internally before each meal.

Add to the above W-A Intestinal Antiseptic Tablets—an afterthought, which should have been first. Take enough to keep the stools odorless.—Ed.

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QUERIES 3267-8:—"Nephritis." I am 37, had constipation, pain in left kidney, albuminuria 4 years; diagnosis subacute parenchymatous nephritis. Urine in 24 hours 48 oz., s. g. 1023, acid, clear, large mucous cloud, albumin from ¼ to 1 per cent, no indican or sugar, red blood cells, epithelial cells, small coarse and fine granular casts, very scanty sediment. Look sound but have morning puffiness of lids, and obstinate constipation.

"Symposium." Why don't you get a symposium on Bright's disease in your helpful journal?

J. R. B., Texas.

I would suggest in this case, first, the absolute milk diet as laid down in Waugh's Treatment of the Sick; in fact the treatment for desquamative nephritis therein described has been used by the writer twenty years with almost unvarying success.

Your suggestion for a symposium is a good one.—Ed.

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QUERY 3269:—"Constipation." What would you suggest for chronic constipation, stomach weak and irritable.

R. R. G., New Mexico.

Here is an idea, Doctor. Empty the lower bowel by colonic flushing and then give juglandin 1 or more granules every two hours through the day, with some device to secure regularity of going to stool. Juglandin resembles rhubarb, but I think has not its astringency. I am inclined to value it highly as a stimulant

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Don't try to cure a cocaine fiend—he hasn't any soul left to cure. The morphine user is never morally dead.

For further suggestions on these queries see the "Ad Index" in the advertising pages following.

of healthy secretion in the stomach and bowels, especially when given in these small doses frequently repeated.—Ed.

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QUERY 3270:—"Nephritis." Man, 35, ill 6 weeks, at first with anorexia, constipation, improved on neutralizing cordial; now complains only of kidney pain; on milk diet, strychnine arsenate, cicutine, lithium benzoate and asparagine the urine clears up, but the pain returns with regular diet and work.

Lady, 45, albuminuria for months, little albumin, anemic.

Man, 26, acute desquamative nephritis, symptoms stationary.

E. A. B., Illinois.

The presence of albumin, red blood cells and oxalate, shows this case to be of some gravity. Place him at once on the treatment for desquamative nephritis described in Waugh's Treatment of the Sick, which I believe you have. If not, kindly inform me, and I will give you the treatment in detail; in fact, the same advice applies to all three of the cases described.—Ed.

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QUERY 3271:—"Multiple Sclerosis." Man, 65, paralysis agitans 4 years, has lost 53 pounds; cause thought to be worry, digestion and sleep good.

S. D. W., Kentucky.

The best results I have obtained in paralysis agitans have come from the use of hyoscine gr. 1-100 hypodermically twice a day, the bowels being kept clear and aseptic.—Ed.

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QUERY 3272:—"Epilepsy." I am 44, no venereal or other disease till 3 years ago, when epileptic fits began suddenly, intervals 7 weeks to a year, 12 in all; lost weight; eat heartily, erections weak, hasty ejaculation, redundant prepuce,

anal fissure, but this is well; rectal sphincter contracted.

A. G. G., South Carolina.

I am inclined to agree with you that there is a connection between the condition of your bowel and genitals and the epilepsy. First, dilate the anus sphincter under anesthesia, and do it thoroughly. Next, pass a sound and see if there is either stricture or hyperesthesia in the urethra. If so, use Euarol in accordance with the enclosed reprint. If the former, dilate it. I would advise cornin 3 granules four times a day, increased if necessary, to strengthen the erectile power. Combat the epilepsy directly by excluding salt from your diet. Don't take any bromides. You should examine the urine practically every day, and note whether the disappearance of uric acid does not herald a coming convulsion. I should be glad to hear from you again and give you all the assistance in my power.—Ed.

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QUERY 3273:—"Verbenin." What is the limit to the dosage of verbenin? I am giving a patient 40 granules a day, which controls as well as 120 grains of potassium bromide. She is not stupid and drowsy as when taking the bromide.

R. H. D., Missouri.

There is no limit to the dose of verbenin unless it disagrees in some unmistakable manner. If you can control epilepsy with it without the stupidity of bromide, it is of inestimable value. Are you excluding salt from the food? This ought to be done by all means, and the search for reflexes should not be neglected.—Ed.

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QUERY 3274:—"Aloin." How many

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Myrrh is too valuable a remedy to be allowed to fall into oblivion, in the crowding of new remedies now prevalent.

The various forms of naphthol are efficient gastrointestinal antiseptics and useful in very many affections.

grains of aloin equal 20 grains of Squibb's Socotrine aloes?

A. V., Kentucky.

It is impossible to say how much aloin equals any sample of aloes, because the latter is not an invariable preparation. In general, 1-6 gr. aloin equals a grain of aloes, but it sometimes equals 20 grains.—Ed.

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QUERY 3275:—"Choking." Man, 56, well till within 6 months, since when he has choking spells on swallowing food or drink, beginning with cramping in stomach, and then regurgitates the food. Lost 30 pounds.

T. P., West Virginia.

He has glossal paralysis, dilation of the cesophagus or simple rumination with dilation of the stomach. Guess it's the latter. If so, feed him food very small in bulk, forbid liquids, and throw soup and normal saline into his colon. In the meantime give him berberine, gr. 1-67 seven times a day.—Ed.

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QUERY 3276:—"Indigestion." I have suffered for three years with indigestion, enlarged liver and neuralgia. The alkaloïds are handy, exact and certain as any class of medicines known.

L. M. H., South Carolina.

Standard treatment for indigestion is a morning dose of Saline Laxative with juglandin 1 granule, copper arsenite gr. 1-250, and 1 W-A Intestinal Antiseptic Tablet, to be taken together every two hours excepting when asleep. When the catarrhal symptoms have subsided, add to the above berberine gr. 1-67. This should be continued three months to secure contraction of the dilated stomach and liver. This has proved a very effective method indeed.—Ed.

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Narceine, as well as all the other opium principles, deserves a new and careful study with pure specimens.

QUERY 3277:—"Tenia." What is the dose of Abbott's Tape Worm remedy for a child 2 years old, robust?

H. G. H., Pennsylvania.

Give the child one-fourth of the full dose, which I think will meet the difficulty. Now, Doctor, here is where I believe doctors disagree. I hold that it takes as much to kill a tape worm in a baby as it does in a man, but others say no—that you can lessen the dose according to the age or weight as you would with any other remedy. If so, take the child's weight as a guide, and, taking a dose of tape worm medicine as suited to a man weighing 150 pounds, give a 15-pound child 1-10 of the dose, or a 30-pound child 1-5, and so on. Suppose you try this and let us know.—Ed.

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QUERY 3278:—"Enteritis." Wife, 50, pain, soreness and fullness in left abdomen, anorexia, nausea relieved by eating or drinking, weakly, pulse 90, very soft, spleen slightly enlarged, fullness and tenderness in descending colon, colon tube found very tender spot 6 inches up, cachexia, giddiness on lying on back.

J. T. S., Ohio.

Intestinal catarrh; possibly ulceration, surely constipation. Treatment: Apocynin 1 or more granules every two hours while awake to strengthen the heart and keep the kidneys and bowels clear. If relaxed and flabby, add 2 granules berberine gr. 1-67 to each dose. Flush the colon three times a week with saline solution containing zinc sulphocarbolate 1 grain to the ounce. Once a week flush with pure water and then throw in a solution of silver nitrate 2 grains to the pint. If the iodoform helps her as you say, you will obtain still better results by adding to it mercury biniodide and

For further suggestions on these queries see the "Ad Index" in the advertising pages following.

arsenic iodide. I think there is no cancer in this case, although, as you evidently suspect, it is a possibility, and if it be malignant, I should then use conduragin locally, washing out the bowel and then throwing up a tablet dissolved in as little liquid as possible.—Ed.

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QUERY 3279:—"Cough." Wife, 63, incomplete recovery from pneumonia, sputa rarely blood-streaked, now all subsided except a nervous cough, when protracted causing sinking spells, over within 2 hours; very thin, skin dark, very weak and nervous.

H., Massachusetts.

For this cough I should advise hyoscyamine amor. and strychnine arsenate, a granule each every fifteen minutes until relieved. Apply mustard over the pneumogastric nerve on the right side of the neck. In the intervals this good lady ought to use Euarol with the oil atomizer; in fact, Doctor, what you want is Waugh's Book on Diseases of the Respiratory Organs. Toning up with the Triple Arsenates and Nuclein would be of very much benefit.—Ed.

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QUERY 3280:—"Jaundice." My son came home from college with collapse, nervous prostration, jaundice, prolonged typhoid followed; still has periodic attacks of dizziness and depression, vomiting, some jaundice.

F. S., Illinois.

In this case I would advise the use of Saline Laxative, boldine and juglandin, 1 granule each every three hours while awake and the Laxative in the morning. After the catarrhal symptoms have subsided, berberine will be most admirably suited. As long as the jaundice continues you should continue the boldine.—Ed.

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Narceine is said to be more mildly narcotic than codeine and even less inclined to cause constipation and dyspepsia.

QUERIES 3281-2:—"Convulsions." Girl, 15, walked 12 miles in sun, that night convulsions came and lasted 36 hours, and recur in spite of treatment.

"Vomiting." What is the alkaloidal treatment for vomiting of pregnancy?

A. G. A., Arkansas.

You ought to have the urine examined for this girl and see if the kidneys are not affected. Keep her bowels clear and aseptic and keep the kidneys flushed, giving her also cicutine hydrobromate from 3 to 10 granules a day. You had better inquire about the menstrual function, which is about due at her age.

For vomiting of pregnancy, clear the alimentary canal and make it aseptic with Saline Laxative and W-A Intestinal Antiseptic Tablets. Keep the renal elimination up to the full standard. Apply compound tincture of benzoin to any fissure which may exist on the os uteri and sedate the pneumogastric nerve by applying mustard over the nerve on the right side of the neck; and give cerium oxalate gr. 1-6 every five minutes when nausea supervenes.—Ed.

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QUERY 3283:—"Renal Insufficiency." I am living in a district where there is much renal deficiency, many of the cases being almost exact counterparts of Query No. 3141. I have always treated these cases in the old way, cathartics and free sweating, scarcely ever being called before the convulsions begin. Will the treatment you advise (boldine and niter) give quicker or more lasting results? The beauty of my procedure is that it stops the convulsions in short order, but the drawbacks offset that. There is always a distressing headache for a few days, followed by stomach and bowel trouble until the urea excreted reaches the patient's normal; and then still greater languor and weakness.

J. A. C., Kansas.

The older studies of narceine were made with very uncertain specimens and need to be carefully repeated with better ones.

The treatment you have used gives relief undoubtedly. I would, however, in the light of present experience, flush the colon and then throw into it a pint of warm saline solution, which would quickly traverse the blood and reappear in the urine, washing the kidneys out at the same time. This especially when uricemic symptoms appear. The treatment I have recommended—boldine and niter—I believe to be the best for permanently increasing the solid excretion by the kidneys.—Ed.

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QUERY 3284:—"Baldness." Man, 32, healthy and good habits except free sexual indulgence, syphilis 9 years ago, treated promptly, bichloride 2 years, for 6 years annoyed by constant falling of hair of scalp and entire body, head hair now thin and looks dead, absolutely no specific symptoms for 6 years; stimulating lotions do no good, iodides upset his stomach and cause pimples very quickly. J. P. Y., South Carolina.

Calcium hypophos. Give your patient 2 to 4 each meal and on going to bed. Pilocarpine: Let him begin in the evening and take 1 every ten minutes until slight sweating or salivation appears. Note the number required, and let this dose be given at once on going to bed each subsequent night. Let him bathe the head every morning with salt water and brush it briskly so as to bring the blood to the scalp, and have him use a hat as little as possible during the day. I see no reason for believing the alopecia to be syphilitic. Dr. Abbott is a believer in Coke's Dandruff Cure, and were he answering this letter he would probably advise its use for one or two years, instead of the salt water. You can use your judgment in the matter.

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Nicotine, one of the most potent of alkaloids, is neglected because wrongly thought to be identical with tobacco.

Any treatment must be chronic to have any good effect.—Ed.

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QUERY 3285:—"Abdominal Pulsation." Lady, 30, teacher, pulsation in epigastrium 7 years, worse in spring, growing worse, gastralgia and biliousness; recently another appears below the first, above navel, visible at times, felt distinctly in median line, synchronous with pulse, not expansible, no tumor, stenotic murmur, dull throbbing pain, worse at night, not influenced by diet or treatment, relief by ventral decubitus, bowels and menses regular, no organs enlarged.

E. M. S., Nebraska.

The affection is abdominal pulsation. I had a case many years ago which I mistook for aneurism. Cured the case by hyperdermic injections of ergotin. You might try the effects of cypripedin 3 granules four times a day. If no benefit results in a week, add cicutine 1 to 3 granules to each dose. Keep the bowels clear and aseptic above all, and test the urine and see if the elimination of solids is up to the standard.

By the way, in that first case of mine, the final cure was accomplished by marriage and motherhood.—Ed.

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QUERY 3286:—"Nephritis." Girl, 15, had headaches, then feet and face swell, urine highly albuminous with many casts.

J. E. D., Arizona.

A large amount of albumin present shows the case to be one of desquamative nephritis, a malady which I consider curable in the vast majority of cases. By the treatment laid down in *Vaugh's Treatment of the Sick*. I hardly think you have this book, or your treatment would have been very different from that

For further suggestions on these queries see the "Ad Index" in the advertising pages following.

you describe. Now, Doctor, if you want to save this girl's life, put her immediately on the exclusive diet of milk. Give here arbutin gr. 1-6, seven times a day, and also the following: Sodium acetate, 1 ounce, acid benzoic and chloroform, of each 1 dram, and water to make 12 ounces. Direct: A tablespoonful every four hours. Keep this up for months until the albumin totally disappears, and then go back very gradually to the diet, and you will cure her nicely.—Ed.

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QUERY 3287:—"Locomotor Ataxia." Man, 37, ataxic, improved on Triple Arsenates with Nuclein.

M. M., California.

Locomotor ataxia is not a very promising malady to begin upon, but of course you know this. Continue the Triple Arsenates with Nuclein, pushing the dose up to full toleration, but by all means, Doctor, keep his bowels clear with a morning dose of Saline Laxative, and a granule of podophyllin at bedtime if the stools are dark and offensive, and give 1 W-A Intestinal Antiseptic Tablet before and after each meal and on going to bed.—Ed.

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QUERY 3288:—"Whooping-cough." Have you a specific for pertussis?

W. H., Missouri.

Yes, we have a specific for pertussis. Saturate the patient as quickly as possible with calcium sulphide and atropine, rinsing the mouth and throat with some antiseptic solution. You can often abort the attack by giving this in the incubative period.—Ed.

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QUERY 3289:—"Enteritis." My wife, ill 2 years, nervous, pain in sigmoid, flatulent, despondent, coated tongue, slight

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Nicotine is a powerful remedy against tetanus. Give gr. 1-250 every ten minutes till full relaxant effect.

jaundice at times, sleep poor, no appetite, muscles flabby and wasting.

J. H. D., Indiana.

Apocynin 1 granule every two hours excepting when asleep, gradually increasing to 3 or even 4 granules if necessary. If malignancy develops, she will have fever. This is all I would like to suggest without a personal examination.—Ed.

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QUERY 3290:—"Uricemia." Mother, 58, neurotic family, eyes failing, arms ache continually or burn, paroxysms of sickness, chills, wave passing from above down, at rectum contracting sphincters, bowels move, hands draw and cramp, rectal tenesmus, stools contain mucous and pus, pulse up to 130, urine s. g. 1010, no albumin, sugar or casts.

G. R. W., Ohio.

This is not clear, but I would diagnose uricemia in the first place and give rhus to full effect. Also clear the bowel by colonic flushing. See if there is really pus. If so, she will of course need treatment for the cause. Until this is done I would not like to tackle that case beyond what I have said. Her heart also must need sustaining if her pulse is as you say. Better give her Heart Tonic in sufficient dosage. For the paroxysms give glonoin, strychnine arsenate and hyoscyamine, a granule each every five minutes until relieved.—Ed.

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QUERY 3291:—"Asthma." I am using strychnine arsenate, lobelin and hyoscyamine in a case of bronchial asthma, with some emphysema. Would berberine contract the connective tissue and thus increase the force of expiration?

R. A., South Carolina.

I think berberine would be useful in this condition and hope you will try it and let us know the result.—Ed.

Nicotine is an efficient antidote in strychnine poisoning. Give gr. 1-250 every quarter hour till full relaxation.

QUERY 3292:—"Indigestion." Girl, 2, weight 24 pounds, 4 stools a day, light and pasty, cannot walk, ill since pneumonia and dysentery in first year. Eats nothing, drinks nearly a quart of milk daily by coaxing, covered with hives, itching, pale, flesh soft and flabby.

J. M. S., Indiana.

Give this child juglandin from 1 to 3 granules a day, also a granule of papayotin each time she is fed. Don't insist on her eating as long as she takes the milk. Flush her bowel three times a week with warm normal saline solution. Also give her calcium lactophos, 7 granules a day, one at a time.—Ed.

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QUERY 3293:—"Typhoid Fever." Man, 20, 3 weeks ill; my first case of typhoid lasting over two weeks; treated by calomel, saline, intestinal antiseptics, Dosimetric Triads, cold sponging, ice bags and packs, linen changed daily; diet of milk, Peptonoids and Armour's beef tea. All the rest came through on this treatment in 8 to 14 days.

J. S. P., Mississippi.

There are several possibilities in this case and one is that the hygiene of the house may be bad. The next is that tuberculosis may have been ingrafted on the original typhoid. Seems to me your dose of turpentine may be increased with advantage, or you can run in a little silver oxide, about 1 grain a day, and give fresh fruit juices in addition to your other excellent diet.—Ed.

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QUERY 3294:—"Dosage." Please give data as to dosage of strychnine arsenate and the Anti-diabetes Granule No. 431.

A. R. J., New York.

Strychnine arsenate should be given 1 granule three times before meals. If

this is insufficient, increase the dose until you get the beginning of toxic action—twitching of the muscles.

The granule No. 431 should be given before each meal, rapidly increased until arsenic symptoms are manifested—irritation of the eye-lids—then the dose should be lessened somewhat so as to keep just below this point. It may require doses to do this that make your hair rise, but the disease seems to neutralize the poison.—Ed.

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QUERY 3295:—"Dosage." A foot-note recommends calcium lactophosphate in doses of gr. iij daily. The infant for whom I want it is but a year old. This would equal 45 grains a day for an adult. Is not this a mistake? I am giving 3 granules a day, a granule of agaricin 3 hours before the time for sweating, and nuclein. Also strychnine arsenate.

G. W. W., Texas.

Infants require much larger proportional doses of calcium salts than adults, because they utilize lime in such enormous quantities. I wouldn't give any lime at all to a man over fifty years. I see no reason for discontinuing Nuclein, but scarcely see the necessity for strychnine arsenate.—Ed.

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QUERY 3296:—"Metrorrhagia." I write for information as to the use of hydrastinine in metrorrhagia, the dosage and to what extent it may be necessary to push it in obstinate cases. Wife, 26, well until 9 months ago, since which she has flowed six months continuously, with cessations not exceeding 12 hours. Uterus slightly enlarged, no displacement; atropine failed; suprarenal extract caused slight decrease but dull pain, entire cessation a few days, then as bad as ever. Hydrastinine and B. U. T. 4 each daily

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Nicotine has been recommended for the cerebral symptoms of fevers. Give gr. 1-250 every hour till relaxation or nausea.

For further suggestions on these queries see the "Ad Index" in the advertising pages following.

gave slight benefit. Would berberine be of use?

D. M. S., Ohio.

Berberine is of no use in these cases. Give hydrastinine gr. 1-12 three or four times a day; but I am not satisfied that it is the best remedy in this case. Apocynin would be my choice, 1 granule every two hours, doubling the dose every three days until you reach toleration. It may be taken four granules every two hours. There is something, however, keeping up this flow which is not natural—either polypus or something else. Pack the uterus with iodoform gauze.—Ed.

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QUERY 3297:—"Amyloid Liver." Man, 47, ill 3 months, amyloid liver, ascites, dyspnea, nausea, vomiting.

W. D. B., Missouri.

No remedy has as yet cured amyloid liver, but I have obtained some benefit, I thought, from iron iodide in a child. That being the case, I would give this patient the powerful iodine compound so often recommended in these pages, iodoform gr. 1-6, mercury biniodide, 3 granules of each, and arsenic iodide 1 granule. Add to this boldine 2 granules and give the combination before each meal and on going to bed. Keep the bowels clear, and if the heart needs toning, add apocynin from 1 to 4 granules every two hours.—Ed.

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QUERY 3298:—"Gastritis." I am 48, slight pain below stomach, bad taste, no distention, losing flesh slowly, weak, vertigo has subsided under juglandin, splashing sound in stomach after drinking, constipated, piles, stools ribbon-like.

C. L. B., Indiana.

You have gastric catarrh with dilation of the stomach. Diet yourself so as nev-

Nicotine has been recommended as a remedy in acute rheumatism; probably to relieve the delirium and other head symptoms.

er to allow your stomach to be filled. Use no iced drinks of any description, and add to your present treatment, which is excellent, berberine gr. 1-6 four times a day, and don't expect much result for at least a month.—Ed.

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QUERIES 3299-3300:—"Seat-worms." My son, 23, has had pin-worms from childhood.

"Apocynin." The apocynin you recommended for menorrhagia was just what was needed. The patient is doing nicely. Should it be given during the whole month or only while the hemorrhage ceases?

E. H. P., Maine.

Give that boy the tape-worm remedy, which will, I believe, destroy everything living in the entire alimentary canal. Also inject pure glycerin an ounce at a time, into the rectum and apply citrine ointment in the folds around the anus in which the worms breed. Camphoral also works wonders in such a case. It is well worth trying.

Apocynin should be given through the month in hemorrhagic cases and generally some calcium salt is needed as well—either the sulphocarbolate, lactophosphate or chloride.—Ed.

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QUERY 3301:—"Diuretics." I would like to see comparative statements as to the value of diuretics as to excretion of solids.

N. B. A., Michigan.

Thanks for your suggestion. Kindly tell me where to find the data on diuretics for which you ask.—Ed.

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QUERY 3302:—"Dyspepsia." Student, has chronic dyspepsia, due to hurried and

Nicotine has been recommended as a remedy in the choleraic affections, Asiatic, infantum and morbus. Questionable.

irregular meals, and anxiety over exams., cannot enjoy meals.

C. H. F., Connecticut.

In the case of your student I would advise a full dose of Saline Laxative, followed during the day by juglandin and berberine with copper arsenite gr. 1-100, 1 granule each every two hours. Diet to consist of food which requires long chewing, and all cold drinks with meals positively forbidden. I send you one can of Saline Laxative and 100 each of the granules mentioned as per your request. I also send you a price-list in which you will find a list of the books published. I would advise Shaller's Guide, which is always satisfactory for a beginning.—Ed.

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QUERY 3303:—"Autotoxemia." Girl, 9, has sick spells every 3 months, fever up to 103, very tired, ill 2 days in which she has 1 to 3 spasms; skin brown before attack, passes brown, slimy mass before recovery, no spasms any other time.

G. R. H., Iowa.

This is a remarkable case of autotoxemia. When the attacks threaten give her a dose of calomel followed by Saline Laxative, and then emetin, a granule every hour until green stools result.—Ed.

✽

QUERIES 3304-5:—"Formula Wanted." What is the formula of Shallenberger's Pills, an antidote for malaria?

"Powder." What is the best all-around dusting powder, which will also make a first-class antiseptic solution for internal and external use?

J. L., Florida.

I never heard of Shallenberger's pills, but ask if anyone else knows. You had better stick to boric acid if you want to use one thing for everything.—Ed.

• • • • •

The great sympathetic nerves are worse than the telegraph for carrying bad news. Digestion is stopped by anxiety.

QUERY 3306:—"Gastro-intestinal Catarrh." Description by patient: Fluid in stomach, splashes on motion; constipated; pains after over-eating, appetite always good; when bowels operate peculiar sensation in head, feels like falling forward; became nearly unbalanced mentally over a guessing contest; feet and hands very cold and wet, worse on exercise; feared suicide, prostrated for months, felt like holding chair to keep still or like smashing everything; iron band around top of head which felt as if burning lead were in it; melancholy, but abnormal thoughts have always been held under control; constant headache for six months except when asleep, frightful dreams; bad taste on rising. Use no alcohol or tobacco; no blood disease.

F. P. B., Missouri.

Treatment: Anticonstipation granules one every hour until the bowels move each day; berberine gr. 1-67 one every hour while awake; diet carefully regulated, avoiding all cold drinks, drinking nothing whatever while eating, but taking a teacupful of hot liquid after the meal has been completed. Food should be chewed thoroughly and long and should be selected with the purpose of compelling such eating. Never allow the stomach to be distended with food. If flatulence occurs take three granules juglandin, three of diastase at the beginning of each meal. He should always come to the table hungry and leave it feeling he could eat more with relish. Follow the treatment persistently.—Ed.

✽

QUERY 3307:—"Enteritis." Girl, 18 months, teething very hard, catarrhal enteritis.

M. S., Texas.

I suggest juglandin from one to three granules a day. See whether the anal sphincter is contracted which sometimes occurs on children.—Ed.

For further suggestions on these queries see the "Ad Index" in the advertising pages following.

News, Notes and Notions

Smallpox comes high. Three months of it cost Alpena, Mich., \$15,000.

❖

Dr. M. R. Hammer, of Newton, Minn., has been arrested on the charge of criminal abortion.

❖

Dr. E. J. Gardiner has been elected Professor of Ophthalmology in the Chicago Eye, Ear, Nose and Throat College.

❖

The Cleveland Health Protective Association urges that play-grounds for girls replace the lawns and flower beds around the schools.

❖

Baudoin has devised a process for condensing wines so that the addition of water will restore the original aroma as well as bulk.

❖

New Jersey has developed a new mosquito, one without the musical attachment, thus allowing her to devote her entire attention to the visitor.

❖

Pekin, Ill., has a terrible smell arising from decaying vegetation killed by the flooding, and incidentally an epidemic of dysentery. Any connection?

❖

Dr. Henry Beates has been reelected President of the Pennsylvania State Ex-

aminating Board, and Dr. H. S. McConnell, of New Brighton, Secretary.

❖

Smallpox is rife in Joliet, Ill. Strict quarantine has been established and every means will be adopted to prevent the disease from breaking out into an epidemic.

❖

Too late! A venerable physician of Little Rock, Dr. P. O. Hooper, waited till he was 69 and then started for the Pacific Coast to find relief from asthma. He died on the train.

❖

The American Electro-Therapeutic Association will hold their annual meeting at the Hotel Kaaterskill, Catskill Mountains, New York, on the 2d, 3d, and 4th of September, 1902.

❖

There are always compensations: The heavy rains that have flooded our streets and sent fancy stockings to unprecedented popularity, have beaten the weeds down so that the hay fever will probably be absent this fall.

❖

Smallpox took a "rise" at the anti-vaccinationists, by attacking the "educated and cleanly" by preference at Lincoln, Neb. If the ordinary laws of hygiene suffice to prevent this malady these people should have been immune.

At the meeting of the A. M. A. Mr. F. H. Osborne, patentee of Osborne's meat juice press, served meat juice to all comers. Meat juice from the Osborne press is the ideal nourishment for children with summer complaint.

✽

Dr. Mary Daman, aged 38 years, the leading woman physician of Minneapolis, committed suicide by cutting her throat from ear to ear. She was a graduate of Vassar College, and had built up a big practice. Ill health was the cause.

✽

In the Orphans' Court at Pittsburg, an opinion was handed down awarding Dr. W. C. Browning, of Philadelphia, \$29,239.25 against the estate of the late State Senator Magee for professional services. The doctor claimed \$350,000. Of that amount about \$200,000 was for profits in stock speculations which Dr. Browning alleged the late Senator had made for him.

✽

We have a letter in our office directed to the lady who wrote the article signed "An Unmarried Woman," in the July CLINIC; but have mislaid her original article with the address. If she will kindly forward it we will send her the letter.

✽

Dr. George Elliott, of Denver, Colo., was divorced from his wife in May last, and married Miss Mary E. Imam, July 16, 1902, formerly head nurse in Eastern Insane Asylum, Anna, Ill. Dr. Elliott is chief gynecologist to the Etta Sanitarium.

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An Iowa town has spent \$2,000 at the Chicago Pasteur Institute to remedy injuries from a cur that was not worth over 2 cents.

Twelve sons of prominent Chicago parents are suffering from typhoid fever believed to have been contracted through the leaking of sewage from a broken pipe into the field of the artesian well from which the Hill Preparatory School, at Pottstown, Pa., draws its supply.

✽

A Baltimore man who makes the blind see—in the newspapers—is about to open a free oculist dispensary in Chicago, to demonstrate his "oscillator" system; all at the expense of a turfman, who has been treated by this method a few months and believes it will enable him to see some day. Possibly. Probably?

✽

At Peotone, Ill., 200 persons attended a dance on July 4th and soon after it was discovered that the three traveling musicians who played for them were suffering from smallpox.

The musicians have been placed in a tent and quarantined on the outskirts of the village. Two are in a serious condition.

✽

A Chicago doctor was recently lured away from home by a bogus call. He went to the place appointed, but failing to find a patient, returned to his apartments. The door was locked on the inside, and when he had broken the lock he found that burglars had ransacked the place, and carried away jewelry valued at \$1,000.

✽

The suicide of Dr. Grissom, an eminent alienist of Washington, and the insanity of an Illinois Insane Asylum chief, emphasizes the remark of Pinel, that after 40 years' work among the in-

Dr. H. L. Hibbard of Kansas City was reported in July as in danger of losing a leg from thrombosis.

sane, his principal reason for thankfulness was that he had not become insane himself.

❖

Epicarin, the new local remedy for parasitic skin affections, has proved exceedingly effective in ridding chickens of lice. A dram of the epicarin used by veterinarians was mixed with $\frac{1}{2}$ lb. of powdered sulphur and a teaspoonful scattered in each nest. The yield of eggs was more than doubled in a week.

❖

Some owlsh contemporary suggests as a cause for ill-health the drinking of hot liquids. Barring those containing alcohol, of which we will subscribe to anything mean anyone says, we do not know of any possible harm that can be done by hot drinks. It is the iced beverages that play the mischief with the stomach.

❖

"Is the disease now prevalent in the United States smallpox?" Many physicians are discussing this question, some contending that it is not smallpox, but could be more properly called variolæ 1, or chickenpox. A few assert that the present epidemic is a new and mysterious one, with which physicians are unacquainted.

❖

The autopsy performed on Miss King, the young woman inoculated recently by Dr. Barney, of New York, with tuberculosis, showed the lungs to be sound, and her general health excellent. But there were signs of the presence of an irritant poison, either arsenic or strychnine. The woman is supposed to have died from strychnine poisoning.

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Dr. T. L. Munro of New Haven was run down by an automobile in June and was thought to be dying at last advices.

A doctor in Trenton, N. J., has discovered a cure for consumption. That makes 999, and all the returns are not yet in. He thinks he is keeping his method a secret, but his habitat gives it away—it's the Jersey 'skeeter! If the patient dies the 'skeeters and their malaria killed him, and if he survives them nothing can kill him.

❖

Sterilized oil and liquid vaselin are the best lubricants for steel sounds, which should be dipped in them as far as possible. The use of semi-solid lubricants is inadvisable, because they cannot be so well kept sterile, and because they may be wiped off by the urethra in great part, leaving the unlubricated surfaces.—*International Journal of Surgery*.

❖

The *N. Y. Journal* is sending out a bottle of Hoff's consumption cure, the prescription, and a 24-page handbook, to any consumptive or victim of asthma, bronchitis or catarrh, free; to anyone, we suppose, who will read the paper. Well, they have to find something to get up an excitement over. Suppose they discover the alkaloids some day! Jimminy crickets! What a hurrah there'll be!

❖

"Dancing is responsible for the prevalence of nervous prostration among women, and for the craving of nerve tonics." Stuff and nonsense! The man who wrote that probably never saw a dance in his life. We have danced lots in our time, and if we had it to do over we would dance lots more than we did. We have never seen any ill result from it other than rosy cheeks and sparkling eyes.

Morphine may compel sleep in fevers, but aconitine, veratrine or gelsemin, with local heat, do it so much better.

The Milwaukee Medical College is no longer on the rack, the charges against the institution which were made to appear so serious were found to be without foundation in fact. After a very exhausting trial the State Board of Medical Examiners, by a unanimous vote, exonerated the school and in its report called attention to the fact that it was a living institution in which the people of Milwaukee and Wisconsin ought to have pride.

✽

A Parisian girl lost her fiance, and not seeing anything in the world worth living for, she jumped into the Seine. But there happened to be one of the great army of unemployed American doctors idling along, and he jumped in and saved her. Now the inevitable result is recorded, and the couple are married. We protest. If the modern girl has to jump into the river to secure another beau, let her spare the medical profession and stick to naval heroes like Hobson, who rather dote on that sort of thing.

✽

Dr. Gabbert, of Trilla, Ill., was brutally beaten by two men who charged him with seeking to prevent the payment of a life insurance claim against the Modern Woodmen. It seems dangerous for anyone to oppose such claims, no matter how flimsy they may be. The man who has the nerve to demand that at the least the legality of claims on the treasury of a beneficial society shall be proved will get himself disliked, to say the least; while the one who with easy generosity pushes the "brother's" claim, and votes away the corporate funds on frivolous pretexts, is the popular man, and gets the honors.

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The user of morphine alone, always has a conscience; and it will respond to the touch of sympathy and the call of duty.

K. B. Ford, a medical student of Indianapolis, in spite of his youth has shown already that calm courage and devotion to duty without which no physician can be really great. A traveling salesman was stricken with smallpox at Louisville, and a panic seized upon the village.

The village health officer telegraphed to Indianapolis for help. Mr. Ford responded. He came to Louisville, built a cabin in the woods, and removed to it the sick man and his effects. There he stayed alone, doing all he could for his patient. In spite of his efforts the patient died. The plucky student, still alone, buried the dead man, and read over the body the funeral service. Then he went back home.

✽

It does seem rather peculiar that in this country physicians continue to prescribe the sulphate of quinine when the hydrochloride of this and other alkaloids possess various and distinct advantages, and in the face of the fact that the hydrochlorides of quinine, morphine, etc., are practically the only salts prescribed by European physicians.

Everybody understands the greater solubility of quinine hydrochloride and knows that the chlorhydric radicle acts less harshly in the economy than does the sulphuric radicle; while chemically there is to it less objection because of possible incompatibilities. Besides, a molecule of quinine hydrochloride contains proportionately more alkaloidal base.

There are very good reasons why this question should be agitated and missionary work done among physicians. True, the hydrochloride salt is comparatively more expensive, but the difference nat-

Honor, truth and duty are tender subjects to the morphinist; they are words without meaning to the cocaineist.

urally would be greatly reduced with increased consumption, for there is no intrinsic reason for a great disparity in price between the two salts.—*Western Druggist*.

❖

Dr. W. H. Smith of Niles, Mich., left his property to a cousin, a nurse; and the widow contests.

❖

Philip H. Livingston, 73 years old, a retired physician of Chicago, dropped dead in the street from heart disease.

❖

Zinc phosphide gr. 1-10 and ext. nuxvomica gr. 1-3, is Hammond's prescription for hemiplegia following apoplexy.

❖

If every man killed the weeds, mosquitoes and flies on his own premises, what a change there would be in this ragged old world.

❖

If all insanity were like Bella Reisch's, asylums would be happier residences than Kankakee up to present advices. She thinks hundreds of boys are trying to kiss her to death.

❖

If everyone were to see to the defects in his own character, what a boost the bad old world would get towards heaven.

❖

The Philadelphia Nurse Supply insists vigorously that it can turn out properly-qualified nurses after a course of ten weeks; and the College of Physicians insists with equal vigor that it can't be done.

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Never trust the man with a pin-point pupil. His hypodermic is always ready for instant use, and used for everything.

Doyen is said to have discovered a serum that will by injection cure carbuncle; but carbolic acid will do that well enough.

❖

The use of the X-ray machine did not meet with favor when the subject was brought before the members of the Illinois Homeopathic Medical Association at their recent meeting in Chicago. One of the most prominent surgeons in attendance said in regard to the apparatus: "They are no good. I have experimented with the machines, and I will say now that they are big fakes, every one of them." Opinions quite to the contrary were expressed by many who took part in the discussion.

It will be better to await definite and undeniable results before making positive assertions.

❖

The State Entomologist of New Jersey says that the mosquitoes peculiar to that state can't bite, won't bite, and have in fact nothing to bite with; while the musical insect that devastates the Jersey shore is common to the entire Eastern seaboard. Well, we must modify our statements hereafter, and simply say that in Jersey the common mosquito bites with a voracity, hums with an emphasis, and presents himself in numbers, unheard of in less favored climes.

❖

The first numbers of *The Surgical Clinic* have been read with much pleasure and shall look forward to its monthly visits for many helpful points. Wishing you much success in the undertaking, I remain,

J. W. HALL, M. D.

Antrim, La.

Age contracts some doctors' therapeutic vision until they can see no indication except the one for morphine.

The Chicago health authorities at last rebel against the exclusive water-infection theory of typhoid fever, and say that the present prevalence is mainly due to infected vegetables and milk.

❧

New York's health board has decided to make a systematic effort to rid the city of mosquitoes. The city is to be divided into seven districts, maps made of all pools, and kerosene applied to each.

❧

The Secretary of the Interior has forwarded to the board of health of Honolulu samples of an alleged cure for leprosy, submitted by a Brooklyn physician in behalf of a fellow practitioner abroad. A thorough test will be made.

❧

It is reported that Dr. Garnault, of Paris, has developed tubercular tumors himself by inoculation from a cow infected with the disease, thus disproving Dr. Koch's theory that human beings are not susceptible to bovine tuberculosis.

❧

Typhoid fever has become very prevalent in Chicago at the time of writing, August 6; and we would suggest that now is the time to get your antiseptics ready. Don't be satisfied with a priori reasoning, or any leader's say-so, but give these ideas a trial and decide for yourself.

❧

Summer or winter, the surgical clinics in Chicago are always crowded with interesting cases. A week of the surgery done in this city would supply one of the medical colleges in small cities for a whole term.

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Myrtol internally for chronic cystitis, gleet, vaginitis, is better tolerated than the balsams and yet effective.

A patient who was treated in a Minneapolis hospital had his affection diagnosed as heart disease. After his death it was found that his heart was about three times the normal size. It was so large that a part of it lay on the right side of the breast, and pressed against the lungs.

❧

A St. Joseph patient in making his will bequeathed to his doctor several bones which he had removed from his leg, thirty-three years before. When asked concerning the value of his uncanny present, the physician remarked: "I will exhibit my bequest to show sick people what they're liable to lose if they don't call in a physician soon enough."

❧

A New York hospital patient is recovering from lockjaw by the injection of antitoxin in small doses, injected into the spinal cord between the second and third vertebræ of the lumbar region. Previously antitoxin had been used, but in the recorded cases it was injected into the brain through a hole bored in the skull.

❧

The coroner's investigation of the death of a patient in a Baltimore hospital, from bullet wounds, self-inflicted, shows that she lived eighteen hours, part of which time she was conscious, with one bullet through the heart, another having penetrated the stomach, liver and spleen, and a third having grazed the heart.

❧

Northwestern University transfers today to the American College of Medicine and Surgery all of the equipment and

Potassium bichromate has been recommended as a remedy for locomotor ataxia. Dose, gr. j before each meal, in water.

buildings of the Woman's Medical College of the university. The new college is the medical department of the college of Valparaiso, Ind., and the trustees of the Valparaiso school will be the trustees of the medical school.

❖

If one wishes to realize what it is to live in this marvelous twentieth century, let him take down the Arabian Nights and note how far the luxurious oriental imagination is behind the western inventive genius. Never a dreamer dreamed, an inspired seer saw, or prophet foretold, anything so wonderful as the modern electric wonders, the telephone, the phonograph, the wireless telegraph.

❖

If anyone feels that the very best way to immortalize his honorable name is to endow the great National School of American Therapeutics, our address can be had for the asking. Were it only known, this American medical profession is capable of showing the world the road in therapeutics and its clinical applications as fully as it has in gynecology, dentistry and general and special surgery. But where is the founder?

❖

John Pope Hodnett, poet, orator, and claimant to the throne of England, under the title of John II, through his alleged descent from the house of York, was admitted to St. Vincent's Hospital yesterday as a patient in the surgical ward. Hodnett is well known in Brooklyn, and his claim to the throne of England has been poured into the ears of all who would listen. He says he is a direct descendent of John Lackland, the

brother of Richard Cœur de Lion, and is thus rightful heir to the English throne.

❖

A young woman patient in a Davenport hospital was recently operated upon and a ball of hair removed from her stomach. There is still another ball of hair in her stomach, which the doctors were afraid to remove at the time of the first operation on account of her weak condition. She can take no food, and the great danger now lies in the fact that she is slowly starving to death. Her mania is almost without a parallel in medical history. Hair eaters have been known before, but she has carried it to the extreme. A once fine head of hair has gone to satisfy a ravenous appetite.

❖

The idea is gaining of having the course in the literary department of universities so modified as to have it embrace the first two years of the medical curriculum, and leave the student to devote the entire two years in the medical department proper to clinical work; thus really shortening the course to two years. By making the studies of the junior and senior years selective this could be readily done, and as most universities do this anyhow, the change would not involve much rearrangement. There seems little reason for the student who is preparing for the medical profession wasting two of the best years of his life acquiring a smattering of many topics which, if not exactly useless to him, are at least not as useful as others to which he could devote the time, when there are so many branches of medicine that receive but a cursory consideration.

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Potassium bichromate has been recommended in pharyngeal and respiratory catarrhs, acute; in very small doses.

Potassium bichromate is said to have proved very effective in dyspepsias with symptoms simulating gastric cancer.